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Utilizing Education to Change College Students' Attitudes About Mental Illness

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Abstract

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by

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MA, Nyack College & Alliance Theological Seminary, 2008

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Researchers have found that public opinion of people who are mentally ill is often negative. This study, grounded in cognitive theories, was conducted to determine if education would improve college students' attitudes toward mental illness and if there were gender differences in those attitudes, as past studies had shown. Attitudes of 184 Jamacian adult college students towards mental illness were measured before and after a didactic seminar using the Attitudes to Mental Illness Questionnaire (AMIQ), Opinion About Mental Illness Scale (OMI), and Help Seeking Attitudes Scale. A nonrandomized trial was used to generate nonequivalent comparison groups, with one group attending the seminar and the other group not attending the seminar. The generalized linear model and an analysis of covariance were used to examine the effects of the didactic seminar, and gender on 2nd survey AMIQ, OMI, and HSAS scores. There were no differences in AMIQ scores between those who attended the didactic seminar and the control group who did not; however, there were significant differences on the OMI and HSAS scores between the attendee participants and the non-attendee participants. The nature of the differences indicated that attendees had a more positive attitude towards people with mental illness after the didactic seminar than did non-attendees. No gender differences were found on all scales for both groups. More research on individuals in different geographic areas and having varied demographic backgrounds is needed to determine the generalizability of the study results because the sample used in the current study was limited to one geographic area and had a specific demographic profile. Didactic seminars promoting positive views of people with mental illness could result in improved perceptions among the general public that may lead to better care.

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Chapter 1: Introduction to the Study

Introduction

The World Health Organization (WHO) reported an increase in disability rates in developed countries primarily due to mental disorders (World Health Organization [WHO], 2003). Patients with mental disorders present a challenge to worldwide health care systems because they contribute to disability, death, and health care costs (Knapp, 2003; WHO, 2003). Despite the extensive research conducted on the stigma of mental illness, negative attitudes still exist toward individuals afflicted with mental illness, which can affect their daily lives and prevent them from seeking treatment (Health Service Executive, 2012; National Disability Authority, 2012; National Suicide Research Foundation, 2012).

Mental disorders are widespread in all countries, with tens of millions of people suffering each year; however, only a fraction of those affected obtain treatment (National Institute of Mental Health [NIMH], 2012). Almost half of all adults will develop at least one mental illness in their lifetime, with the most common being anxiety and mood disorders (Center for Disease Control [CDC], 2011). Even though mental illness is pervasive in the population, the main problem is clustered among a much smaller percentage (about 6 %) of people who suffer from a seriously debilitating mental illness (CDC, 2011).

Stigmatization of those with mental illness has increased among the American public (Torrey, 2011). Recent international surveys showed that the public frequently holds negative views of people with mental illness and fails to understand the causes and consequences of such illnesses (Scheffer, 2003). Researchers continue to find that

viewing people with mental illness as unsafe or delinquent is one of the most frequent themes in accounts of mental illness (Elbogen & Johnson, 2009). Despite deinstitutionalization and efforts to educate the general population about mental illness concerns, stigmatizing attitudes continue to be widely held by the general population in the United States and many Western European countries (Angermeyer & Matschinger, 2005; Arthur et al., 2010; Conner, Koeske, & Brown, 2010; Corrigan, Watson, Warpinski, & Garcia, 2004; Gibson, Abel, White, & Hickling, 2008; Jorm & Griffiths, 2008; Samouilhan & Seabi, 2010).

The stigmatizing of mental illness may be more likely to persist in lower-income nations such as Jamaica than in the United States and other Western countries (Gibson et al., 2008). Jamaica has employed a system of deinstitutionalization since the 1960s, but levels of stigma remain high among the general public and health professionals (Hickling, Robertson-Hickling, & Paisley, 2011). Hutchinson (2012) stated that little is done to address stigmatization in Trinidad and Tobago and other Caribbean Islands. The process of community mental health care and reformation of the health system in Jamaica poses particular concerns to the treatment of the mentally ill in Jamaica (Hickling et al., 2011). Thus, in order to reduce negative attitudes toward those afflicted by mental illness, the Jamaican government and public health officials should better educate the public.

Recent evidence in the United States showed that intervention services have not reduced discrimination against people with serious mental illnesses or substance abuse problems, and in some cases, discrimination may be getting worse (Pescosolido et al., 2010). People afflicted with mental illness are viewed as being creators of their illnesses,

unpredictable, liable for their peculiar comportment, having weak willpower, incompetent, and dangerous (Carter, Golant, & Cade, 2010). Additionally, these views are not restricted to members of the general population; even professionals from mental health fields contribute to stereotypes about mental illness (Angermeyer & Matschinger, 2005; Corrigan & Watson, 2002; Jorm & Griffiths, 2008; Mann & Himelein, 2004). The rise in public mental health literacy combined with the endorsement of neurobiological causation has little effect on public stigmatization, and in some cases even leads to an unintended increase (Angermeyer & Matschinger, 2005; Jorm & Griffiths, 2008). Stigma related to mental illness has also been found to vary depending on the mental illness in question (Jorm & Griffiths, 2008). Stigmatization of schizophrenia is more common than stigmatization of depression; additionally, treatable disorders have fewer stigmas attached to them (Mann & Himelein, 2004).

The stigma of mental illness has been associated with reduced utilization of services, causing a major barrier to treatment (Mann & Himelein, 2004). Connor et al. (2010) noted how internalized stigma inhibits an individual from seeking mental health support, particularly among older adults. Granello and Granello (2000) concluded that stigma toward people with mental illness stems from a number of factors: (a) the belief that individuals are responsible for their mental health problems; (b) the belief that willpower is sufficient to overcome them; (c) a lack of knowledge regarding mental illness; (d) the breadth of disorders that the term mental illness covers; and (e) not knowing what different forms of mental illness entail for the sufferer, his or her family, and society at large. Granello and Granello further suggested that educational programs

and campaigns could provide accurate information on all aspects of mental illness and thus reduce stigmatization.

Background

The five factors Granello and Granello (2000) cited may function as important components of mental health stigma reduction in nations where previous interventions have failed and stigma towards mental illness remains high. Jamaica represents one of these nations and is undergoing a transitional period of mental health service allocation and organization (Hickling et al., 2011). The reorganization of mental health in Jamaica included an update of the Jamaican Mental Health Policy that restructured the finances in healthcare that had existed since 1997 and was considered outdated by the WHO (2009). The need for reformed mental healthcare in Jamaica is perhaps more pressing than in other Western nations given that there is no legislative, monetary endowment for persons affected with mental disorders and only 1% of individuals with a mental infirmity obtain social welfare benefits (WHO, 2009). There is a lack of consistent services available for those suffering from mental illnesses. This indicates that Jamaica is a suitable case study for analysis of the factors in mental health stigma and their reduction.

In 1962, Jamaica achieved independence from the United Kingdom and made significant public policy modifications to its mental health services, including developing a community mental health service, major deinstitutionalization of the single mental hospital, and a profound reorganizing of the country's mental health legislation (Hickling et al., 2011; McKenzie, 2008; Whitley & Hickling, 2007). Concerted attempts to educate the public about mental illness and its treatment have also been conducted through media. Hence, significant changes have occurred in mental health care in the Caribbean, as

indicated by early reports (Hickling et al., 2011). However, in a national survey of mental health, the majority of respondents stated that they did not feel comfortable with people with mental illness and actively avoided contact with them (Gibson, Abel, White, & Hickling, 2008). More recently, Hickling et al. (2011) examined whether deinstitutionalization and the integration of mental health services had reduced stigma attached to mental illness. They found that the Bellevue Mental Hospital in Jamaica was a negative symbol of mental health care. This was due to the stigma of that hospital being for patients with incurable mental illnesses.

A main factor of mental illness stigma in Jamaica is the dehumanization of those with mental illness who live on the streets (Hickling et al., 2011). There was a widespread prejudgment that the mentally ill are unpredictable and dangerous (Hickling et al., 2011). However, there were positive accounts for community mental health care services now in place and these appear to be transforming some of the negative stigma associated with mental disorders and treatment. Gibson et al. (2008) revealed that despite high levels of stigma attached to mental illness, people from families who have experienced mental illness have a lesser tendency to stigmatize, suggesting a moderating effect of exposure to mental illness and personalization of the problem. Therefore, community integration may be one of the most powerful tools in reducing the stigma associated with mental illness.

The director of mental health services in Jamaica's Ministry of Health and Environment has encouraged Jamaicans to ease stigma associated with mental illness as it prevents people from accessing treatment. He further advised them to view mental illness as a treatable chronic disorder (Francis, 2007). Arthur et al. (2010) found that stigma

could be subtle and interact in unique ways with Jamaican cultural norms and idiosyncratic nuances in the meanings of madness and mental illness. Arthur et al. (2010) established that people have various understandings of stigma, their conflicting views leading to various emotional responses toward people living with mental illness. Furthermore, McGoldrick et al. (2005) noted that many people in Jamaica are not aware of all aspects of mental health problems. For example, they rarely use the word *depressed* or *anxious* or see these issues as disorders needing therapy, but are more likely to understand them as medical or spiritual disturbances. Other researchers found that Jamaicans are less likely than those from other nations are to seek help with their mental health problems (Yorke, 2007). Mental illness is a prevalent problem in Jamaica and attitudes toward those with mental illness are often negative. This includes the community at large and the individuals suffering from mental illness themselves, indicating that cultural norms within Jamaica can affect communities and the mentally ill in negative ways.

Jackson and Heatherington identified a need for more research on the attitudes of Jamaicans toward mental illness, despite many decades since deinstitutionalization and recent drives to improve the understanding of mental health through community education and positive media representations. The few studies undertaken suggested that stigma still exists, and continues in the younger population. Researchers have found that adolescent Jamaicans prefer contact with individuals who do not have a history of mental illness (Jackson & Heatherington, 2006). Hence, the goal of this study was to investigate the gaps in literature regarding the understanding of mental illness of college students in Jamaica and how it affects attitudes towards people with mental illness.

Jamaica has a young population with an average age of 24 years (World Fact book, 2012); 33% of its population is below the age of 15 years and Jamaica spends 6% of its total health budget on mental health (WHO, 2009). However, figures showed that there is particular concern about mental health issues in the young Jamaican population. For example, Moses (2011) examined stigma among 102 adolescents, and emphasized that these issues are compounded by poverty and crime in particular areas within the country. Furthermore, while stigma has been increasingly attached to mental illness, the adolescent population is more likely to suffer from mental health issues. Smith and Ashiabi (2007), as well as Lambert and Lyubansky (1999) reported that Jamaica has a high rate of behavioral and emotional problems in adolescents between the ages of 11-18 years. It is unclear how many young people are aware of and utilize appropriate services when suffering from mental illness. This is of particular concern, as only 9% of outpatient services for mental illness in Jamaica are intended for young people and adolescents (WHO, 2009).

Attitudes toward mentally ill people seeking help may also be negative. For instance, in studies of Jamaican immigrants in Canada researchers have shown that they tend to cope with depression by emotional resilience and not showing vulnerability (Schreiber et al., 2000). As a result, there is a lack of help seeking and masking of symptoms from friends and family (Schreiber et al., 2000). These coping mechanisms are based on the negative stereotypes of others and are uniquely informed by Jamaican culture, in contrast with the coping mechanisms native to other countries such as Canada. Considering the high ratio of young people in Jamaica, the mental health issues prevalent in this younger population, and the evidence that stigmatization of mental illness exists,

additional research was needed to consider the attitudes of younger Jamaicans toward mental disorders. Furthermore, exploration of these attitudes and how to reduce stigma was essential for future change and was lacking in the current literature.

Problem Statement

Since the early 1960s, people with mental illness have been deinstitutionalized in Jamaica (Hickling, Robertson-Hickling, & Paisley, 2011). In spite of positive reporting in the press, a generation of community care for mental illness and more favorable attitudes toward mental illness than in other countries, stigmatization of mental illness remains and is exacerbated by cultural attitudes and an internalization of stigma by mentally ill people. This stigmatization leads to an attitude of fear and avoidance of people with mental illnesses. Hence, there was a need to change the public perception of mental illness.

Reducing this stigma could lead to increased provision of mental health treatment, through mobilization of society and empowerment of those with mental illness in the community. Education is an important means of achieving reduction of stigma attached to mental illness. The method of delivering educational material might make a significant difference. In this study, a didactic seminar was utilized to impact changes in attitudes toward mental illness.

Purpose of the Study

The purpose of this current study was to close the gap regarding the understanding of mental illness of college students in Jamaica and how a didactic seminar affects attitudes towards people with mental disorders in Jamaica, West Indies. The study

also determined whether there were gender disparities in the attitudes towards mental illness among college students in Jamaica.

Research Questions

The main research questions addressed in this study were:

RQ1. Does a didactic seminar change attitudes about mental health among college students in Jamaica, West Indies, after controlling for 1st survey scores and age by using them as covariates?

RQ2. Is there a difference between male and female in attitudes towards mental illness among college students in Jamaica, after controlling for 1st survey scores and age by using them as covariates?

Hypotheses

The following hypotheses addressed the research questions:

$H1_a$: The didactic seminar positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H1_0$: The didactic seminar did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H2_a$: Gender positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H2_0$: Gender did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

The following hypotheses addressed interaction between the independent variables:

$H3_a$: There is a significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H3_0$: There is no significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

Theoretical Framework

The cognitive theories that form the basis of this research are cognitive consistency and cognitive heuristics (Rydell, McConnell, Strain, Claypod, & Hugenberg, 2007; Simon, Snow, & Read, 2004; Wood, 2000). I chose these cognitive theories because they contribute to the understanding of didactic intervention by the college in changing attitudes of college students in Jamaica toward people with mental illness. I utilized the cognitive consistency and cognitive heuristics theories in this study with two main objectives in mind: one directed toward cognitive goals and the other related to the students' attitudes toward mental health. These theories focus on how people process, deal with, and react to, information or stimuli.

In this study I drew on cognitive consistency theory to scrutinize the relationships between students' attitudes and beliefs toward people with mental illness (Rosenberg, 1956). The premise of cognitive consistency theory is that an unstable state may occur when an individual's attitude toward, and knowledge of, mental health are inconsistent. Persuasive communications in the form of a didactic seminar attempted to change the affective component of an attitude system by changing the cognitive component of an attitude. The goal of the didactic seminar was to offer students new information

concerning mental health with the hope of changing the cognitive component of their attitudes toward it.

Cognitive consistency theories hypothesize that, should contradictions develop amongst perceptions, people are driven to reestablish agreement. Cognitive consistency states that a person will attempt to ensure that his or her opinions, beliefs, and attitudes are consistent with one another and with his or her own experiences, knowledge, and behavior. This may be achieved by altering attitudes, but also by rejecting contradictory evidence or altering how evidence is evaluated (Simon et al., 2004). At its very basic level, cognitive consistency is a mechanism to ensure behavior consistent with knowledge. People embrace particular attitudes because these attitudes help them attain their key purposes (Walter & Langer, as cited in Crano & Prislin, 2010).

Cognitive consistency and cognitive heuristics theories suggested that offering a didactic seminar would introduce students to new ways of thinking, which might encourage the adoption of new attitudes toward mental health problems and the mentally ill. Specifically, offering a didactic intervention by the college would aid in the acceptance of a new opinion and hence attitude formation on students. Attitude formation is dependent upon the incentives that are offered in communication; for instance, the benefits of acceptance of the mentally ill to society (such as lowering the cost if treated swiftly, etc.).

Nature of the Study

A quasi-experimental design study was used to determine the effect of a didactic seminar (aimed at educating and informing participants) on attitudes amongst college students toward individuals with mental illness in Jamaica, West Indies. In that, the

intention of this study was to support or refute the hypothesis that a didactic seminar is effective in changing the attitudes toward people affected by mental illness. The overall aim of the didactic seminar was to change the opinions of a sample of college students regarding mental illness, thereby reducing the stigma associated with mentally ill individuals, and thus decreasing the resistance of these students to interacting with such individuals (Miller, 2002; York, 2007).

I conducted the research at a teachers' college in Jamaica, West Indies. The study utilized a repeated measure quasi-experimental design, utilizing two groups of college students: the *experimental group* (who attended the didactic seminar) and the *nonequivalent control group* (who opted not to attend the didactic seminar). This study utilized a nonequivalent group design, because random assignment to the control group was used and I was restricted to selecting those students who opted out of attending the didactic seminar to be included in the control group. However, I predetermined the number of participants in the didactic seminar attendees group. The nonequivalent control group was similar to the didactic seminar attendees group because both were drawn from the same body of students.

The independent variables were attendance at the didactic seminar (yes, no) and gender (male, female). First survey scores and age were the covariates. First survey scores and age may have been related to the dependent variables; in addition, they may have accounted for any differences between the two groups. Pretest is “usually the most highly correlated with the posttest” (Trochim & Donnelly, 2008, p. 203). The dependent variables were gender, a demographic item, and attitude toward mental illness, measured as the total scores on the Help Seeking Attitude Scale (Fischer & Farina, 1995), Attitudes

to Mental Illness Questionnaire (Luty et al., 2006), and the Opinion About Mental Illness Scale (Cohen & Struening, 1964), after accounting for 1st survey scores and age.

The study specifically measured pre- and postdidactic session scores on the Help Seeking Attitude Scale (Fischer & Farina, 1995), Attitudes to Mental Illness Questionnaire (Luty, Fekadu, Umoh, & Gallagher, 2006), and the Opinion About Mental Illness Scale (Cohen & Struening, 1964). The use of these measures allowed quantification of an individual's level of stigmatization of (or overall perception of) the mentally ill and assessed any changes caused by the didactic seminar. It also allowed evaluation of gender differences in attitudes towards mental illness. I was thus able to determine whether the didactic seminar affected the college students' attitudes toward mental illness in different ways. A significant correlation between the didactic seminar and gender would indicate that changes in attitudes resulting from seminar attendance are different between males and females.

This research study was based on the premise that didactic seminars were more likely to change opinions than traditional types of classes, as the didactic seminar format is more interactive, lively, and participatory, while delivering consistent and clear information to all involved (Eiser & Ross, 1977; El-Sayeh et al., 2010; Simmons & Brandon, 2007). The research questions were addressed with the use of a 2-way Analysis of Covariance (ANCOVA). I also conducted descriptive statistical analyses to characterize the samples gathered for the study.

Definition of Terms

The following terms were operationally defined for the purposes of the study:

Affective. Feelings or emotions that something evokes; for example, fear, sympathy, hate (American Psychological Association [APA], 2006).

Behavioral. Includes all mental and bodily action in terms of reaction by glands and muscles to exterior influences (motivations) or a bias to act in certain ways (Dusenbery, 2009); for example, avoiding people with mental illness (Crano & Prislin, 2010).

Cognitive. Refers to our thoughts, beliefs, and ideas about something (The American Heritage Dictionary, 2012). When a human being is the object of an attitude, the cognitive component is frequently a stereotype. For example, people with mental disorders are dangerous (Carter et al., 2010).

Mental health. "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 is able to make a contribution to his or her community" (WHO, 2010, para. 2).

Mental illness. A clinically noteworthy behavioral or psychological syndrome that occurs in an individual that is related to existing anguish which may be due to cultural response to a specific incident, but may be due to an exhibition of a behavioral, psychological, or biological dysfunction that is neither nonstandard behavior nor a conflict that is principally between the individual and society (APA, 2000).

Stigma. A loss of status or discrimination (including labeling, stereotyping, cognitive separation and/or emotional reactions) based on an often-objective attribute that marks people as different, and is dependent on both relationship and context (Yang et al., 2007).

Assumptions

I assumed the following in my research:

1. The participants would be representative of the population from which they were drawn and they would engage actively with the didactic seminars.
2. The participants would respond honestly and completely to the assessments and would be available to complete the postintervention assessments.
3. The participants would be given the opportunity to participate voluntarily in this study and would not introduce any biases.
4. The experimental group and the nonequivalent group would be highly comparable before the study (i.e., the study would not suffer from selection threat or selection bias). If this was true, the single group threats to internal validity would be ruled out and therefore could not explain second survey group differences. This assumption was tested to some extent by comparing the two groups across demographical information to see whether there were similarities or differences that could affect the analysis conducted. However, it was possible that there would be differences on variables that I had not measured.
5. No historical event would occur between the first survey and second survey to influence the second survey results of the two groups (i.e., the second survey results would not suffer from selection history).

6. There would be no selection-testing threat (i.e., the experimental group and the nonequivalent control group would not learn from the 1st survey differently).
7. The study would not suffer from selection-regression (i.e. one group would not score more extremely on the 1st survey than the other).
8. If some of the participants were not available to complete the post-intervention assessments, the assumption was that the selection-mortality of both groups would be the same and there would be no common factors between those who do and do not complete the post-intervention assessments that may have biased the results.
9. The time allowed for any short-term effects of the didactic seminar to fade would be sufficient for this purpose.
10. Validity and reliability of the assessment tools were generalizable to the Jamaican population of college students.
11. The ANCOVA assumption of "randomization, linear relationship between first survey and second survey scores and homogeneity of regression slopes" (Dimitrov & Rumrill, Jr., 2003, p. 161) would not cause significant problems in this nonrandomized design. With nonrandomized designs, ANCOVA adjusts the second survey means for differences among groups on the first survey because such differences were likely to occur with intact groups (Dimitrov & Rumrill, Jr, 2003).

12. The first survey scores would be reliable. Unreliable first survey scores in nonrandomized designs results in treatment effect that is seriously biased (Dimitrov & Rumrill, Jr, 2003).

Scope and Limitations of this Study

This study did not attempt to understand population-level attitudes towards mental health in Jamaica. The sample used for the research was based on college students, who may have had different opinions and attitudes from those of the general population. Furthermore, generalizability to other Caribbean nations may have been limited given the specific population studied in this study.

Significance of the Study

As mentioned previously, there is little literature available on the attitudes of Jamaicans toward mental illness; there is even less literature that examines the issue of stigma associated with mental health in Jamaica. The literature that has been published suggested that although understanding of mental illness has improved, stigma attaching to severe mental illness is widespread, with two-thirds of Jamaicans actively avoiding people with severe mental illness, and nearly three-quarters admitting that they feel uncomfortable around them (Gibson et al., 2008). Therefore, in my research I aimed to address the problems that stigma presents to mentally ill individuals in the context of increasing deinstitutionalization of the mentally ill in Jamaica, which results in more mentally ill people being treated in the community and more individuals coming into contact with the mentally ill.

In this work I measured the extent of stigma within a subpopulation in Jamaica, notably including a subpopulation (students in training to become teachers) in a position

to influence attitudes of children in schools. I also looked at whether a particular educational intervention by the college (using didactic seminars) could help reduce this stigma. This research will be published in a recognized peer-reviewed journal and I will present the findings at relevant international conferences to make them available to the research community. The importance of this research derived from the high incidence of stigma placed upon the mentally ill worldwide.

In this research I aimed to achieve positive social change through exploration of a specific educational intervention by the college in combatting stigmatization of mental illness. Such interventions have an inconsistent basis of evidence and there is only a small amount of data available for this specific population. Future educational methods could be formulated based on the success or failure of this intervention. Additionally, I aimed to show the positive effects of educational interventions, which suggest that education could be effective as a primary tool in changing attitudes and opinions toward the mentally ill. This would mean that such interventions have the potential to improve the human and social conditions of the mentally ill who live in a community setting, diminishing the stigma placed on them and encouraging people to be more likely to interact with and help them. This would lead to advantageous attitudes or eagerness to seek professional help, improvement in patient outcomes, a reduction in total health costs, and greater social and health care benefits.

Summary

Mental illness continues to disturb the lives and well-being of millions of people all over the world; it incurs considerable social and economic costs. The most destructive aspect of mental illness is its devastating consequences for its victims and their families,

which include suicide, divorce, alcoholism and drug abuse, unemployment, child abuse, damaged social relationships, and wasted lives. In these respects, mental illness can be regarded as a terrible affliction for many people in Jamaica and elsewhere in the world. In spite of optimistic reporting in the press and greater community care for mental illness in Jamaica than in other countries, stigmatization of mental illness remains, and is aggravated by cultural attitudes of the mentally ill people themselves. Hence, there was a need to alter the public's opinion of mental illness, and transform its attitudes and views toward the mentally ill. Education is an important means of averting stigma from people with mental illness and informs them of the importance of seeking treatments. Thus, reduction in stigma would lead to an increased desire on the part of individuals with mental disorders to seek out mental health treatments.

The aim of this study was for me to determine the effect of a didactic seminar, which was intended at educating and informing participants on attitudes toward individuals with mental illness, and specifically measured pre- and postdidactic session scores on the Help Seeking Attitude Scale (Fischer & Farina, 1995), Attitudes to Mental Illness Questionnaire (Luty, Fekadu, Umoh, & Gallagher, 2006), and the Opinion About Mental Illness Scale (Cohen & Struening, 1964). This chapter provided an overview of the study, presenting an introduction and context to the research, and a brief summary of the literature as a background to the study. The chapter also included a statement of the problem explored in the dissertation and an explanation of the purpose of the study. The nature of the study was also outlined, along with the research questions, a formal statement of the hypotheses, and the theoretical basis of the research. Terms used in the

course of the dissertation were defined, and the assumptions and limitations of the research clearly indicated.

In Chapter 2 I present different studies conducted on the perception of mental illness, to include empirical research conducted in Jamaica. A synthesis of all related literature is provided. In Chapter 3 I discuss the research design and its appropriateness for the study. The population and selected sampling, data collection, instrumentation, and data analysis are discussed. Chapter 4 includes the results of the analyses and Chapter 5 includes the findings, recommendations, implications, conclusions, and summary.

Chapter 2: Literature Review

Introduction

In many Western industrialized countries there is a stigmatization of mental illness (Borinstein, 1992; Pescosolido et al., 2010). The public may associate mental illness with dangerousness and unpredictability (Elbogen & Johnson, 2009; Pescosolido et al., 2010). Counterintuitively, some mental health professionals have been found to hold negative attitudes about the mentally ill, and contribute to harmful stereotypes (Angermeyer & Matschinger, 2005; Corrigan & Watson, 2002; Jorm & Griffiths, 2008; Mann & Himelein, 2004). Hence, stigma remains a critical problem particularly in efforts that intend to curb the rising global mental health disorders (WHO, 2003). Many different factors influence prejudice towards people with mental illness. I proposed that, to reduce intolerance to mental illness in a manner consistent with the philosophy of mental health literacy, there is an urgent need for more educational programs and campaigns that offer accurate information on all aspects of mental illness (Granello & Granello, 2000).

Jamaica has made substantial public policy changes to its mental health services, including development of a community mental health service, major deinstitutionalization of the single mental hospital, and reorganization of mental health legislation (Hickling et al, 2011; Hickling & Paisley, 2011). Substantial attempts to educate the general population about mental illness and its treatment have also been employed through popular media and other sources (Hickling et al. 2011). However, researchers have found that stigmatization in Jamaica, although reduced, is still evident (Gibson et al., 2008; Francis, 2007; Arthur et al. 2010; Hickling et al. 2011), and

continues even in the younger population (Jackson & Heatherington, 2006). Stigmatizing attitudes are a factor that inhibit the utilization of mental health support (Arthur et al. 2010); there is also evidence suggesting that Jamaicans are less likely than other populations to seek help for mental disorders (Yorke, 2007). These issues are particularly relevant considering that Jamaica has a relatively young population, with an average age of 24 years (World Factbook, 2012); and as figures show, that there is particular concern regarding mental health issues in the young Jamaican population (Verhulst, as cited in Smith & Ashiabi, 2007). These issues are compounded by other social and economic problems such as poverty and crime in particular areas within the country.

In this chapter I summarized the current research literature on theoretical and methodological issues relevant to the current study. To understand the social issues of stigmatization in regards to mental illness, I addressed such topics as stereotypes, stereotype formation, attitudes, attitude change, prejudice, and discrimination. The research was relevant to theories of cognitive heuristics and cognitive consistency, which were reviewed. The issue of mental illness and stigma in Jamaica is considered in more detail. Finally, theories on attitudes and attitude change towards mental illness were also summarized.

Literature Search Strategy

The following research databases were searched: Academic Search Premier, PsycINFO, PsycArticles, and Google Scholar. The terms *stereotypes, stereotype formation, attitudes, attitude change, stigmatization, discrimination, cognitive heuristics, cognitive consistency, cognitive dissonance*, and *didactic seminars* were searched for,

together with spelling and tense variations and functional equivalents. Other publications referenced in articles found in the initial searches were also examined for relevance. Chapter 2 is organized by its examination of mental health and illness; public perceptions of mental illness; stereotypes, prejudice and discrimination; stigma; mental illness and stigma in Jamaica; and changing attitudes toward mental illness.

Mental Health and Mental Illness

Mental health and mental illness are associated with several interrelating social, psychological, and biological factors. The WHO (2005) defined mental health as "a state of well-being in which the 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. 2). At the heart of this progressive mental health is an indication of the well-being of individuals, particularly because mental health guides the daily operation in their community. In both industrialized and developing nations, however, evidence indicates that poverty (related to low levels of education) is a strong indicator of mental illness; and this seems to be worldwide, despite a country's level of development (WHO, 2005). The incidence of mental illness is higher among the poor, homeless, unemployed, poorly educated, victims of violence, migrants and refugees, indigenous populations, children and adolescents living in poverty, abused women, and the neglected elderly (WHO, 2003).

Susceptibility to mental illness may occur when one experiences insecurity and despair, threat of violence, and physical ill health (WHO, 2005). However, mental illness and poverty act together in a destructive sequence. Mental illness inhibits the capacity of an individual to learn and participate in their communities; however, poverty fosters the

chance of developing mental disorders, and reduces people's ability to seek help from health services (WHO, 2008). As such, while leader of poor countries should strive to empower communities, the poverty condition continuously results in an increasing number of mental illnesses among the people.

The various forms of mental disorders are diagnosed according to standard classifications. The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) classified psychiatric diagnoses of mental illness. The five factors it evaluated is published by the American Psychiatric Association and includes all mental health disorders for both children and adults (WHO, 2005). The DSM-IV considered many different aspects in diagnosis because many factors in a person's life frequently affect their mental health. The five factors that the DSM-IV evaluated are as follows:

1. Axis I: Clinical Syndromes is considered the diagnosis for illnesses such as depression, schizophrenia, social phobia, anorexia nervosa.
2. Axis II: Developmental Disorders and Personality Disorders. This includes autism and mental retardation, which first become apparent in childhood. Personality disorders are clinical conditions with longer lasting disorders and include the individual's way of relating to the world. They include Paranoid, Antisocial, and Borderline Personality Disorders.
3. Axis III: Physical Conditions affect the development, continuation, or exacerbation of Axis I and II Disorders. For example, physical conditions such as brain injury or HIV/AIDS that can result in symptoms of mental illness are included on this axis.

4. Axis IV: Severity of Psychosocial Stressors are events in a person's life, such as death of a loved one, unemployment etc., which can influence the disorders listed in Axes I and II.
5. Axis V: Highest Level of Functioning whereby the professional appraises the person's level of functioning both in the present and for the previous year. This helps identify how the above four axes relate to the person and what fluctuations in behavior might be expected (DSM-IV).

Mental illness encompasses all diagnosable mental disorders and is indicated by continuous, irregular shifts in thinking, mood, or behavior mixed with stress and a diminished ability to function. Mental illness alone is a public health problem, but it is often associated with other chronic diseases causing sickness and fatalities. According to the WHO (2003), disability rates in developed countries are primarily due to mental illness. The WHO (2003) estimated that 450 million people worldwide have a mental health problem. Worldwide figures estimated that, to some degree, more than 150 million people experience depression; yearly close to 1 million commit suicide, roughly 25 million suffer from schizophrenia, 38 million suffer from epilepsy, and more than 90 million live with an alcohol- or drug-use disorder. The number of individuals with disorders would likely increase significantly over the next 20 years (WHO, 2003).

Mental health problems also result in high costs to society through failure to treat them early (CDC, 2011; WHO, 2003). Yet, mental illness and mental health issues have been neglected topics for most governments and societies. Recent data demonstrated the large gap that exists between the burden caused by mental health problems and the resources available in countries to prevent and treat them (WHO, 2001). In contrast to

the overall health gains of the world's populations in recent decades, the CDC (2011) indicated that the burden of mental illness has increased requiring increasing efforts to monitor mental illness and anxiety disorders.

Mental Illness in the United States

The National Institute of Mental Health (NIMH, 2012a) noted that psychiatric epidemiology researchers have found that mental disorders are widespread in the United States; with tens of millions of people suffering each year, only a fraction of those affected obtain treatment. Around one quarter of adults are diagnosed with one or more disorders in a given year. The NIMH (2012a) also noted that mental disorders are common among children in the United States and just over 20% (or 1 in 5) children, either presently or at some point during their life, deal with a debilitating mental disorder.

Almost 50% of adults will develop at least one mental illness in their life, with the most common being anxiety and mood disorders (CDC, 2011). Even though mental disorders are pervasive in the population, the main problem is clustered among a much smaller percentage (about 6%) of people who suffer from a seriously debilitating mental illness (CDC, 2011). The World Federation for Mental Health (WFMH, 2006) also highlighted the link between mental illness (including substance abuse and dependence) and the risk of suicide. In the WFMH report, the authors confirmed that while the majority of individuals with a mental illness would not take their own lives, studies in Europe and the United States have reported that up to 90% of individuals who died by suicide are diagnosed with some type of mental disorder, including alcohol and drug abuse.

In the 2007 report of the CDC, the authors showed an increase in suicide rates in the United States from nearly 10.5% in 1999 to 11.3% (per 100,000 people). This could be attributed to the rising number of individuals in the United States who experience depression (Mark et al., 2007). Mark et al. (2007) compared depression levels and suicide rates across the United States and found that mental health outcomes were more favorable when access to mental health services and utilization of these services is highest. There were also key significant associations found in socioeconomic status. The more educated the population and the greater the percentage with health insurance, the lower the suicide rate. In addition, there were fewer incidences of depression in the more educated population (Mark et al., 2007).

The equitable distribution of health care services within a state resulted in a greater number of people in the population obtaining mental health services (NIMHb, 2012). The US Department of Health and Human Services (DHHS) "National Survey on Drug Use and Health" (2010) showed that mental illness and substance abuse in the United States is on the increase. A five-year study found that in 2009, women aged 18 or above were more likely than men aged 18 or older to have some mental illness (24% and 16 %, respectively) as well as serious mental illness (SMI) (6% and 3 % respectively). Of the 45.1 million adults aged 18 or older with any mental illness in the past year, nearly 20% met conditions for substance dependence or abuse in that period compared with 6.5% among those who did not have mental illness in the past year. In the same period, of the 11.0 million adults aged 18 or older with SMI, nearly 26% also had substance dependence or abuse compared with 6.5% of adults who did not have mental illness. Two million young people (aged 12 to 17) had major depressive episode (MDE) during

the past year. Among these, nearly 36% used illicit drugs in the past year compared with 18% who did not have past year MDE (DHHS, 2010). The most common reason for substance abuse among youths who received mental health support was feeling depressed (46%). Hence, it is important to appreciate the link between substance abuse and mental illness when considering a population-wide intervention, in light of the strong association between these two factors.

According to the National Alliance on Mental Illness (NAMI, 2003), the austere mental disorders of 50% of individuals were exacerbated by substance abuse; 37% of alcohol abusers and 53% of drug abusers also have at least one serious mental illness. NAMI (2003) also mentioned that about 29% of the mentally ill individuals abuse either alcohol or drugs, and that there is a need to cultivate proper cohesive treatments for the mentally disabled. The report from DHHS (2010) also suggested that rising unemployment rates have contributed to increasing mental health statistics. Most of the mentally ill are unemployed, lose their health insurance and hence, and are unable to seek treatment. The findings also verified that economic insecurity, shrinking social services, and continued stigmatization of mental disorder all play a part in the mental health dilemma in the United States (DHHS, 2010). The evidence indicates that the prevalence of mental health illnesses continues to be of significant concern around the world, as well as in the United States, and is likely to increase in forthcoming years. Together with social and economic variations that affect mental illness, the issue of negative perceptions of mental illness and its stigmatization is said to continue. The next section discussed public perceptions of mental illness and how they could be related to stereotyping of mental disorders.

Public Perceptions of People with Mental Illness

Mental illness is often considered separately from physical illness in the minds of the public, representing a more mysterious and difficult to understand disease process. Because of this lack of understanding and the association of mental illness with various social taboos, such as substance abuse and unemployment, there is a high level of stigma associated with mental illness throughout all societies (Scheffer, 2003). Stigmatization could directly affect the well-being of the patient, leading to poorer health outcomes, but it is also an important determinant of how policies providing access to and funding for treatment are formulated (Scheffer, 2003). Therefore, understanding the public perception of mental illness and identifying ways to modify such perceptions form an important basis for policy creation and change in mental illness health care.

Historically, the study of public attitudes toward mental illness and persons with mental illness had been conducted mainly in the field of psychology. Deinstitutionalization and the employment of community-based mental health care brought mental illness into the public domain (Hickling et al., 2011). Prior to the introduction of deinstitutionalization process for persons with mental illness, mental illness has been considered a private issue treatable by friends and families (Hickling et al., 2011). The changes that concealed social problems became increasingly observable.

In recent years, worldwide surveys of public attitudes and beliefs concerning persons with mental illness have shown that the general population frequently hold negative and inflated views about their dangerousness, have adverse views of their decision-making abilities, and lack knowledge of their disorders and their causes (Borinstein, 1992). Bornstein (1992) found that Americans believed mental illness was

caused by either physical circumstances (e.g., chemical imbalances in the brain) or societal influences (e.g., stress or alcoholism/drug abuse). While a number of Americans did not perceive individuals with mental illness as extremely violent or specifically dangerous, there was concern about the possibility of violent behavior (Borinstein, 1992).

Researchers have continued to find that viewing people with mental health issues as unsafe or delinquents are the most frequent themes in the perception of mental illness (Angermeyer & Matschinger, 2005; Anglin et al., 2006; Corrigan & Watson, 2002; Jorm & Wright, 2008; Mann & Himelein, 2004; Pescosolido et al., 2010). However, researchers proposed that it is more probable for mentally ill people to be victims than perpetrators of violence; and further that mental illness alone is not a predictor of violent behavior. Other elements, including substance abuse, history of violence, demographic variables (e.g., sex, age), and the existence of stressors (e.g., unemployment) were found to play a role (Elbogen & Johnson, 2009).

Wahl (2004) in a focus group study asked individuals (who in their occupations could have an effect on people with mental health problems) what they thought about people with mental illness. Nearly half of those polled mentioned instability as a primary concern, fearing that individuals might be out of control and attack someone. In reality, as Wahl (2004) noted, a substantial number of people with mental illness are ordinary individuals who work and are members of the community. A British survey by the Department of Health (2009) monitored public attitudes towards mental illness, and to track changes over time (since 1994), found that levels of tolerance to people with mental illness had increased over the period of the study. However, there was an increase from previous years in those agreeing that one of the main causes of mental illness was a lack

of self-discipline and willpower. Further, when asked to signify what describes a person who is mentally ill, the majority chose someone with schizophrenia.

Granello and Granello (2000) concluded that intolerance toward people with mental illness stemmed from a number of factors: (a) the belief that individuals are responsible for their mental health problems; (b) the belief that 'willpower' is sufficient to overcome them; (c) a lack of knowledge regarding what mental illness is; (d) the breadth of disorders that the term 'mental illness' covers; and (e) what different forms of mental illness involve for the sufferer, family, and society at large. They advocated educational programs and campaigns to provide accurate information about all aspects of mental illness.

Beliefs about the etiology of mental disorders play a powerful role in attitudes toward mental disorders (Corrigan et al., 2000; Goldstein & Rosselli, 2003; Granello & Granello, 2000; van't Veer, Kraan, Drosseart, & Modde, 2006). Specifically, the more controllable a mental disorder is perceived to be, the more negative is the public attitude (Granello & Granello, 2000). In the case of depression, many stigma reduction programs are led by the medical model that describe this disorder as a medical illness, whereas contextual models stress societal effects for which an individual should not be blamed (Corrigan et al., 2000; Goldstein & Rosselli, 2003). Using an undergraduate sample, Rusch et al. (2009) compared a medical, contextual, and control (talked about depression stigma but did not examine the biomedical/contextual models of depression) stigma reduction programs to one other, and to a no-program control. There was a significant reduction in stigma in the contextual and control programs compared with the no-program control, whereas the biomedical program did not affect attitudes. The beliefs

about depression reduced the effect but only from a medical perspective. Therefore, based on these studies, contextual and control programs seem to be effective in reducing stigma but a biomedical model may be unwarranted to use with individuals who do not agree with the representation.

In a meta-analysis, Read Haslam, Sayce, and Davies (2006) also reported that the biogenetic approach was counterproductive and actually heightens prejudice, fear, and desire for social distance. Studies from Hong Kong (Chou & Mak, 1998), New Zealand (Read & Law, 1999), Australia (Haslam, Rothschild, & Ernst, 2002), Germany (Angermeyer & Matschinger, 2005), Russia, Germany, and Mongolia (Dietrich et al. 2004), and the United States (Martin, Pescosolido, & Tuch, 2000; Phelan, Link, Stueve, & Pescosolido, 2000) have documented these negative effects over time, augmenting the international research conducted from as early as 1970 that had reported negative results. Even without a specific psychiatric diagnosis, the early studies showed that the mere term "mental illness" provoked negative reactions (Read et al., 2006). Manderscheid et al. (2010) in a study of the general population of 35 states, the District of Columbia, and Puerto Rico, reported that educated respondents were more likely to believe that mental illness can be effectively treated. The majority (57.3%) expressed a belief that people in general were caring and sympathetic towards individuals with mental illness. However, only a quarter of the people who suffered from mental illness agreed with this (Manderscheid et al., 2010).

Granello and Granello (2000) investigated college students' beliefs regarding the definition of mental illness and its relationship to their tolerance toward individuals with mental disorders. They found that attitudes towards mentally ill people in the community

were predicted by a person's definition of what mental illness is. For example, when people embrace disorders such as bulimia nervosa and anxiety disorders into their definition of mental illness, they are more compassionate, less authoritarian, and less socially restrictive in their attitudes. Mental illness can affect an individual in a number of ways (Jorm & Griffiths, 2008). First the damage caused by the disease itself, secondly the social disapproval that is inflicted by people who are ignorant or afraid of what it means, and finally the barriers that are raised by social stigma that prevent people who desperately need help from seeking it (Corrigan, 2004).

People with mental illness suffer psychological distress and disabilities that diminish the quality of their lives and deprive them of pleasure and goal fulfillment (Knapp, 2003; Luty et al., 2006). In addition, negative attitudes and beliefs toward mental illness can be threatening, leading to prejudice and discrimination that further complicate living with mental illness and often prevent people with mental illness from seeking appropriate help (Mann & Himelein, 2004; Moses, 2011). The next section covers stereotyping, prejudice, and discrimination are considered in detail. Further, in line with the theoretical underpinnings of this research, the cognitive processes linked to these social psychological phenomena are assessed in order to evaluate the significance of these processes in perpetuating the stigmatization of mental illness.

Stereotyping, Cognitive Heuristics, Prejudice, Discrimination, and Stigma

To appreciate stigmatization of a mental disorder, the concept of stigma must be separated from the associated practices of stereotyping, prejudice, and discrimination (Kanahara, 2006; Macrae, Milne, & Bodenhausen, 1994). Even though these phenomena are often linked (Berndsen, Spears, van der Pligt, & McGarty, 2002; Johnson & Jacobs,

2003), it is potentially possible to have one without the others. Moreover, highlighting their distinctiveness facilitates understanding.

Stereotyping

A stereotype is a belief about a group of individuals. In social and psychological research, "stereotype" usually pertains to a group of people, but the definition can equally apply to any group of individual objects (Kanahara, 2006). The concept of a stereotype was first applied to the social sciences by Lippmann (1922), who described it as a definition that is applied based on what people already believe about something or someone prior to the acquisition of any specific knowledge about that thing or person. While there are several definitions available, all definitions however included a priori belief that can be applied to members of a given group.

Stereotypes of people are based on social groupings (Scheffer, 2003; 2004). A social group is cognitively constructed, and characteristics are attached to that group. Some of these characteristics permit the identification of members of that group – dress, physical appearance, age, location, language, pattern of speech, behavior, and so on (Yorke, 2007). Other characteristics are informational and not immediately observed, such as attitudes toward work or other personality characteristics (Stangor & Lange, 1993). People are not born with stereotypes (Scheffer, 2003; 2004). Moreover, stereotypes, though their existence is universal, are culture-specific; the groups to which stereotypes apply are themselves fluid (Cuddy et al., 2009).

The fact that stereotyping exists across cultures (Ota, Giles, & Gallois, 2002; Sczesny, Bosak, Neff, & Schyns, 2004) and history (Schaller & Latané, 1996) would suggest that it is a useful and positive adaptation, and that it provides more benefit than

harm. However, researchers found that stereotypes can be maladaptive. An *illusory correlation* occurs when a person has merely indirect experience or knowledge of a social group. Subsequently, more attention is focused on the infrequent behaviors of that group than frequent behaviors, especially if the infrequent behaviors are negative (Berndsen, Spears, van der Pligt, & McGarty, 2002; Johnson & Jacobs, 2003).

In Australia, the governing body on mental health found that certain social influences encouraged the development and maintenance of stereotypical misconstructions of people with a mental illness (Francis et al., 2004). For example, legislation implied an association between mental illness and criminal behavior, exaggerating the likelihood of those with mental illnesses participating in criminal activities and encouraging a more reproachful handling of those suspected of such behavior (Smith & Ashiabi, 2007). Further, there were no specifications for tackling distortions in the media relating to mental illness (Schwarz & Gidron, 2002). Evidence suggested that stereotyping of people who have a mental illness leads to stigmatization; stigmatization then causes embarrassment to individuals with mental health disorders in pursuing treatment and seeking employment and workplace support. Further, stigmatization generates obstacles to mental health promotion (Senate Select Committee on Mental Health, 2006).

Individuals' instinctive tools for developing concepts of social groupings tend to operate on any information that they have available to them, regardless of whether it is accurate or based on direct experience (Scheffer, 2003, 2004). The easier it is to detect a difference between them and another person, the more likely it is that the other person would be labeled as part of an out-group (Linville, 1998). Inevitably, physical

appearance plays a significant role in the formation of our social group concepts, as does language or physical location (Ensari & Miller, 2002). Social stereotypes can become complex, contradictory, and misleading at this point, and incorrect assumptions can easily be made about members of one's own in-group (Kalmuss, Gurin, & Townsend, 1981). Stereotypes are clearly social shortcuts (Linville, 1998 cited in Darley & Cooper). Like any such heuristic, they can be incorrect. Stereotypes are not merely social heuristics; they are also cognitive heuristics (Halberstadt & Catty, 2008). That is, they allow us to reduce the amount of cognitive effort expended in interacting with others by allowing us to assume certain things about them, and they permit us to move more quickly to more useful specifics (Macrae, Milne, & Bodenhausen, 1994).

Cognitive Heuristics

One of the reasons that people reach inaccurate conclusions in social situations is that they employ cognitive heuristics (Hayes & Allinson, 1998). Heuristics are mental shortcuts that forego a degree of accuracy in return for cognitive economy. Heuristics can be adjusted to different situations, permitting more cognitive tasks to be deduced (Halberstadt & Catty, 2008). However, heuristics can be susceptible to errors of judgment, especially when they are based on limited, skewed, or inaccurate experience or information. Understanding heuristics is important in grasping how people form prejudiced attitudes, inaccurate stereotypes, and how they can be altered (Hayes et al., 2002). The *availability cognitive heuristic* operates when a person's familiarity with a subject, object, or event is used as the basis for judging its frequency, normality, or popularity, rather than objective evidence (Halberstadt & Catty, 2008). More precisely, the availability cognitive heuristic is the ease with which a person can recall information

or can associate one piece of information with another that is used as the basis for determining whether something is frequent or normal (Schwarz & Gidron, 2002). The availability cognitive heuristic is a mental shortcut that depends on instant examples that come to memory.

Memory can be conceived as a network of interconnected ideas (Cohen & Struening, 1962). Each idea has an association with another that is heavily connected (Conner, Koeske, & Brown, 2010). The strength of that connection is based on a number of factors including: (a) the frequency with which that connection is experienced; (b) the frequency with which it is recalled, thought about, or considered; (c) the importance of the connection; (d) the personal salience of the connection; (e) the emotional associations of the connection; and (f) the number of other pieces of information that are also related to the connection (Hayes et al., 2002). The availability heuristic assumes that the strength of the connection, and therefore the ease of recall, is an indicator of the frequency or normality of the information (Halberstadt & Catty, 2008). Since frequency is a significant factor in how strongly integrated a piece of information is with the rest of our memories, this can influence recall regardless of matters of personal importance or emotional association (Schwarz & Vaughn, 2002). For example, media reporting of mental illness among the prison population can often lead to such information being highly accessible. The reporting that an individual is both a prisoner and mentally ill, perhaps following escape, can link these issues strongly within the background of fear for personal safety, thereby exaggerating the importance and emotional content of the association (Conner, Koeske, & Brown, 2010). Repeated use of this association (often

not in real life, but in movies and other contexts) can reinforce these ideas on a regular basis, strengthening the link between criminality and mental illness (Arthur et al., 2010).

A single or rare event or experience can become strongly connected with our other memories if it is powerful or is repeatedly rehearsed through thinking or talking about it (Arthur et al., 2010; Conner, Koeske, & Brown, 2010). Consequently, rare but impactful events can be perceived to be considerably more common than they are because of the effect that they have on us, and the degree to which they are spoken about (especially in the media) or thought about (Schwarz et al., 1991). This kind of event can result in a skewed and inaccurate perception of dangerousness of people with mental illness. Media reporting of violence by people with mental disorders tends to be more frequent (i.e., multiple reports and follow-up reports, rather than just one) or more sensationalized than violence committed by other people (Wahl, 2003).

The probability of a particular event occurring, or a behavior being expressed, or a feature being true of an individual, is often estimated using the *representativeness heuristic* (Halberstadt & Catty, 2008). This heuristic uses the degree to which an object or person is representative of a class or group to estimate how likely it is that the object or person share other, as yet un-assessed, features with that group (Kahneman & Tversky, 1972). Generally, the representativeness heuristic is based on the assumption that one's perception and understanding of the features of a group, a stereotype, are accurate. If one's understandings of the group is wrong or not knowledgeable in regards to mental health, then the representativeness heuristic offer incorrect conclusions. The representative heuristic should render immediately apparent how likely an object is able to possess a certain feature based on other features, and to make adjustments in different

situations (Campbell, Sullivan, & Davidson, 1995). For example, when one encounters a homeless individual, it is likely that one assumes they are mentally ill based on the association between these two characteristics, despite the recognition that these two groups are sociologically distinct. In light of the higher incidence of mental illness in this group, it is possible that this heuristic would be reinforced should an individual be considered mentally ill, depending on their behavior. However, application of such assumptions to other groups (e.g., the unemployed) may lead to false conclusions and would not be useful in this context.

An *exemplar* as a cognitive heuristic can be considered a sub-form of the representativeness heuristic (Hutchinson & Alba, 1997). An exemplar is an individual in a group who is viewed as embodying all the essential defining characteristics of that group. In cases where a person has little experience with other members of a group, the exemplar may be seen as a "perfect" representation of the group (Hutchinson & Lynch, 1990). Whatever features the exemplar displays may be assumed features of the group rather than idiosyncratic features of the exemplar (Hutchinson & Lynch, 1990). For example, encountering an individual with mental health issues who has marked delusional beliefs can lead to the assumption that all forms of mental illness are characterized in this way, regardless of any specific diagnosis or the underlying beliefs of the exemplar. Associating these individualized characteristics with other individuals with mental health problems distort perceptions and lead to false assumptions regarding the beliefs and behavior of this group.

The *commitment heuristic* maintains that, once a person has become committed to a certain course of action, or is personally invested in a particular belief, it is harder to

alter that person's beliefs and dissuade him or her from either the action, or the reasoning and evidence underlying it (Abelson, 1986). This heuristic overlaps somewhat with cognitive dissonance, which also suggests that a person who has already expressed a certain belief or engaged in a particular behavior would resist altering that belief or contradicting that behavior to avoid cognitive dissonance. Kanodia, Bushman, and Dickhaut (1989) suggested that people might factor in personal socical costs (e.g., loss of face or reputation) into their decision-making, leading to decisions that would not be logical based solely on the costs of the decision itself, but make sense when a wider picture is examined. For instance, individuals with strong beliefs regarding the behavior of those with mental illness would be less likely to change such attitudes when presented with contradictory information, particularly if they champion this belief within a group and do not wish to lose face over an opposing viewpoint or backtracking on previous statements. A review of these studies suggests that the information may be credible, persuasive, and can be overridden by the desire to remain in an authoritative position, which weakens the desire to change.

Walton and Dawson (2002) argued that informal logic is often a logical and reasonable approach to a complex scenario, particularly one in which a decision to undertake a course of action is made before all the information is available. Thus, any attempt to alter a person's beliefs, or the actions they would take because of those beliefs, needs to consider the subjective assumption that a person's commitment to a certain path is advantageous, even if it appears not to be. As Hinshaw (2007) noted, when stereotypes become set in people's minds, and especially when people ignore definite data about the

person or group in question, they have a tendency to develop a destructive, derogatory attitude, and are prejudiced.

Further than stereotypes, which relate to a general portrayal of members of a particular group, prejudice indicates a more sinister attitude loaded with negative connotations. For example, people with mental illness may be stereotyped as substance abusers; the stereotypes may be represented in a number of ways, including comically and light-heartedly. However, when one converts this stereotype into prejudice, there would be derogatory comments made to individuals with mental illness regarding drug and alcohol abuse and only negative aspects of substance abuse recorded (Hinshaw, 2007). This development easily leads to victimization and discriminatory behavior (Hinshaw, 2007; Walton & Dawson 2002), as previously described.

Prejudice

Even though social scientists often disagree in the exact way they define prejudice, they generally agree that it encompasses a prejudgment, usually negative, about a group or its members, exhibiting groundless attributions to individuals of a social group (Fiske, & Haslam, 1997; Jones, 1997; Nelson, 2002, as cited in Plous, 2003). This is in contrast to stereotyping, where standardized beliefs about one group are based on some prior assumptions or observations. Prejudice is not merely a statement of opinion or belief, but an attitude that includes feelings such as contempt, dislike, or loathing (Hinshaw, 2007). Though multiple definitions of prejudice have been proposed, explanations that are most applicable to this research include an assumption that the value judgment that forms part of the prejudice is not based on accurate and reasonable appraisal of factual evidence (Eagly, & Karau,2002). Hinshaw (2007) classified

prejudice as “an unreasoning, unjustifiable, overgeneralized, and negatively tinged attitude towards others related to their group membership” (p. 22).

Research on prejudice began in the 1920s and was founded upon American and European race theories that attempted to prove the superiority of White people (Duckitt, & Sibley, (2007). As a result of changes in the 1930s and 1940s due to the civil rights movement and challenges to imperialism, several theorists came to consider prejudice as unreasonable; and they explored the prevalence of personality disorders in individuals associated with racism, anti-Semitism, and other forms of prejudice. The researchers concluded that prejudice was a part of an ”authoritarian personality;” rigid thinkers who conformed to authority saw the world as black and white, and imposed obedience to social rules and orders, and were more likely than others to hold prejudices against low-status groups (Adrono, Frenke, Levinson, & Nevitt, 1950).

Allport (1954) investigated the connection between prejudice and categorical thinking. He identified the emotional, social, economic, and historic dimensions of prejudice, and proposed that prejudice is a product of normal human functioning. For example, in the United States, at least 75% of African Americans have White ancestry, and 1-5% of American Whites’ DNA is from African ancestors (Salazar Davis, 1991). Biologically, Black and White ethnic individuals contain a range of genes rather than an opposition. However, acceptance of the false purity of racial groups has permitted the exploitation of Black people for centuries (Plous, 2003). By ignoring the factual basis of genetic data and propagating the notion of racial purity, categorical thinking opposes two distinct groups by highlighting difference rather than similarity (Allport, 1954; Plous, 2003).

Categorical thinking can misrepresent perceptions by minimizing differences within groups (assimilation) and overstating differences between groups (contrast) (Linville, Fischer, & Salovey, 1989). Linville, (1998) found that, closely related to assimilation is the out-group homogeneity effect. He also found that in relation to attitudes, principles, personality traits, and other features, more similarities are perceived in out-group than in-group members. As a result, out-group members are at risk of being seen as identical, and hence are more likely to be stereotyped. He further indicated that, whether the out-group is that of another ethnic group, religion, or race; this judgment of uniformity is confirmed.

Prejudice is also closely connected to the way that in-group and out-group members justify another's behavior (Brown, Jones, LaRusso, & Aber, 2010). For example, if homelessness of people with mental health problems is often attributed to idleness, lack of moral fiber or capability, prejudice toward such people is liable to continue. Alternatively, if homelessness is thought of as being caused by redundancy or domestic violence, prejudice may not be a factor or could decrease. Nevertheless, individuals often assign harsh attributions to the behavior of out-group members (Brown, Jones, LaRusso, & Aber, 2010). For over five decades, psychologists studied why some people are more prejudiced than others are, highlighting two major lines of explanation based on personality or social psychology. The personality account proposes that prejudice is caused by personality traits (e.g., Adorno et al., 1950; Ekehammar & Akrami, 2003). The social psychology description suggests that prejudice is caused by situational influences such as social group membership, social identity, social self-categorization, and social position (Ekehammar & Akrami, 2007).

Two theoretical frameworks explain individual differences in prejudice. One approach originates from the authoritarian-personality theory (Adorno et al., 1950) and was developed further by research on right-wing authoritarianism (Altemeyer, 1998). The other is social dominance theory (Sidanius & Pratto, 1999), which states that prejudice and discrimination are common human displays where groups are created on the basis of powerful organizations in which participants of some groups have the wealth, power and need to overpower others. The key individual difference variable is social dominance orientation - a preference for inequalities (Altemeyer, 1998; Adorno et al., 1950).

Conversely, more recent research suggested that right-wing authoritarianism (RWA) and social dominance orientation (SDO) are not personality traits but measures of social attitudes, social beliefs, or social evaluations (Kreindler & Lumsden, 2006; Saucier & Goldberg, 2001) and should be situated in the field of social psychology. However, Akrami and Ekehammar (2006) contended that RWA and SDO are linked by personality and social psychology with underlying personality as a clear cause. It is important to note that prejudice is a purely internal phenomenon and can be moderated by factors such as social norms and learned behaviors to the extent that internally-held prejudice may be suppressed entirely if social pressures are strong enough (Crandall, Eshleman, & O'Brien, 2002).

Social forces, social norms, and learned behaviors affect the adoption of attitudes, modification of them, and any subsequent modes of expression. Other factors also moderate the expression of prejudiced attitudes. The expression of prejudice against immigrants, for example, is moderated by both pragmatic (e.g., taking jobs) and symbolic

(e.g., threat to "national identity") perceived threats (Pereira, Vala, & Costa-Lopes, 2010). Similarly, prejudice against the mentally ill can be moderated by the perceived risk of violence or aggression (threat to self), a symbolic perceived threat, and a perception of weakness on the part of the individual. Personal safety and fear of the unpredictability of those suffering from mental illness are moderating factors directly affecting prejudice. However, Hinshaw and Steir (2008) noted that although these practices may take place due to people's nature and environment, they are flexible and can be changed through minding the situation of an individual, changing social policies to encourage transformations in individuals' attitudes and behavior. When stereotyping and prejudice involve cognitive and affective components, discrimination is the resulting behavior.

Discrimination

Discrimination is biased treatment of, or detrimental behavior toward, others based on group membership (Corrigan et al., 2003). Discrimination can be prompted by individuals, families, or communities, or by an entire society or country (Morrison & Becker, 1975). Discrimination restricts the rights of people diagnosed with mental illness; unfair practices may unofficially or officially be authorized by law or presiding jurisdiction (Corrigan et al., 2003; Morrison & Becker, 1975). Stereotyping therefore relates to the cognitive aspect of group segregation; prejudice concerns the responsive and emotional component of such separation (Corrigan et al., 2004). Out-group members are devalued and discrimination involves behavioral responses, above all acts that restrict the rights of others or engage in blatant maltreatment of them (Hinshaw, 2007).

People with mental health issues are confronted by stereotypes and prejudice due to the misunderstandings of mental illness (Pinfold, 2003). According to Corrigan and Watson (2002), these people often face discrimination by being deprived of the possibilities that make up a good life: a decent job, safe housing, reasonable health care, and relationships with a variety of people. They further stated that comments or actions can have a significant cumulative effect on individuals with mental health problems, regardless of the perceived or intended innocuousness of each individual comment; negative comments can be spread out over a long period of time and still have a cumulative impact on the individual; ultimately, such comments destabilize and distress the individual in question, through a process of mental attrition, characterizing the stigma of society toward them.

The continual message that a person is *different* (not like you), or *less* (you are better than them) is gradually learned and often internalized, which can result in depression, anxiety, fear, hopelessness (Corrigan & Watson, 2002). The continued tacit acceptance of treating a group or groups of people differently to "normal" people offers support in principle for all discrimination (Pierce, 1995). Furthermore, though overt acts of discrimination (e.g. refusing a promotion based on gender) are illegal, it is impossible to legislate against overtly or covertly discriminatory behaviors. It is far more effective, though perhaps harder, to address the underlying attitudes of prejudice and thereby forestall discriminatory behaviors, than to attempt to police every behavior.

Prejudice is an individually held attitude of value judgment, and discrimination is an individual expression of a prejudice (Murray, Holmes, & Griffin, 1996; Nelson, 2004). According to (Gibson et al., 2008), bias is either positive or negative discrimination

against a particular group. They further indicated that, a prejudiced person may not act on his or her attitude; someone can be prejudiced toward people with mental illness but not discriminate against them (Gibson et al., 2008). Prejudice includes all three components of an attitude (Murray, Holmes, & Griffin, 1996). The affective component involves a person's emotion, the behavioral component denotes the way in which one may perform or behave, and the cognitive component involves a person's belief or knowledge about an attitude object (Nelson, 2004).

Discrimination involves behavior; it may be informal, but recognized and accepted, like the ongoing pay discrepancies between single and married workers; or it may be unrecognized and unquestioned, but widespread, as in the current and ongoing bias against men working in child-care roles (Murray, Holmes, & Griffin, 1996; Nelson, 2004). In a research conducted in England, Pinfold (2003) asked service users of mental health facilities about their experiences of stigma. The study revealed that the groups most frequently cited in needing targeted educational sessions to reduce discrimination were doctors, closely followed by school children, employers, and the police (as cited in Thornicorft, Rose, & Kassam, 2007). Pinfold found that, a history of discrimination hostile to a minority group can promote stereotyping and prejudice, even in people who have never met a person from that group. These harmful attitudes can put biased practices into effect by holding the sufferers responsible for their own predicament (Nelson, 2004).

Today, people with mental health disorders are stigmatized (Moses, 2011). They are being discriminated against on a daily basis, being deprived of access to goods, and services, or, being treated based on false assumptions. Discrimination of people with

mental illness occurs across the world, regardless of culture (Angermeyer & Dietrich, 2006; Muller, Nordt, Lauber & Rossler, 2007). There is evidence that some individuals who have mental illness avoid treatment due to the social stigma attached (Scheffer, 2003). For instance, many of these individuals are neglecting to take medications for depression and other psychological disorders because they dread what would ensue if other people learn of this. Individuals with mental disorders are most often distressed that their friends and family would accuse them of being insane, absurd, or too incompetent to solve their problems; there are some people who would not file insurance claims for psychotherapy because they fear their employers would fire them (Schwartz, 2006).

Lauber, Nordt, Braunchweig, and Rossler (2006) found that there is little variation between the attitudes of mental health professionals and those of the general population. For example, people with personality disorders are often less well received for therapy by psychiatric staff. Surprisingly, there has been little research into this possible stigma but the evidence available implies that such staff has negative perceptions of people with mental illness diagnosis; judgmental approaches from this segment of society can significantly affect patient care (Social Exclusion Unit, 2004). Further, in a British study, Corrigan, Watson, Byrne, & Davis (2005) evaluated how a past diagnosis of alcohol dependence shaped consultant psychiatrists' views about the treatment. The researchers found that psychiatrists were more likely to assess patients with mental diagnosis as problematic, difficult, and less in need of treatment than patients diagnosed with medical conditions. Such valuations directly affect the way in which patients are treated; hence, the extent of this problem within the health care system needs to be further explored.

Discrimination and oppression are also important determinants of mental health outcomes (Krieger, 2001). In studies focused on racial discrimination, researchers consistently found an association between higher rates of self-reported discrimination and poorer mental health (Corrigan et al. 2003, Corrigan et al., 2004). Racial discrimination is associated with a reduced sense of well-being, low self-esteem, and lack of influence, psychological suffering, and other mental illnesses (Krieger, 2000). The relationship between experiences of personal oppression in relationships and adverse mental health outcomes is strong. For example, women who have experienced emotional and/or physical violence in relationships have high rates of depression, anxiety, stress, pain syndromes, phobias and chemical dependency as well as poor individual health (WHO, 2002). Researchers have also linked poor mental health with bullying. Disturbance from bullying has been linked with depression, low self-esteem, weak self-concept, isolation, and anxiety (NIMH, 2013).

The significance of prejudicial viewpoints is that they can become transformed into discriminatory behavior with mental disorders (especially certain diagnoses) continuing to be trademarked as unacceptable, reprehensible, and shameful (Corrigan et al., 2004). Whether this behavior is present in the general population or the health care profession, discrimination poses a risk to the well-being of those with mental illness and obstructs the process of equitable care for this group (NIMH, 2013). In the next section, I address the concept of stigma, its relation to mental illness, and how the stigmatization of mental illness has progressed to the present.

Stigma

According to Hinshaw (2007), the term "stigma" comes from the act of branding members of disapproved groups so they displayed an observable sign of shame for all members of society to see. The researcher noted that stigma is a worldwide depreciation of certain individuals due to their having a particular trait or belonging to a group that is disapproved, devalued, or shamed by general society. Stigmatization is inherently self-reinforcing (Gibson et al., 2008). Once an impression is formed, whether through direct experience or though impressions offered by others, it is hard to alter (Hayward &Bright, 1997). The saying *"first impressions last"* received research support, for very realistic reasons (Denrell, 2005).

According to Denrell (2005), individuals form first impressions; people are inevitably going to evaluate anyone they meet; if the first impression is positive, then further interaction is likely; the first impression is reinforced and "proven" through experience; if the first impression is negative, then further interaction is less likely, as the negatively evaluated person is more likely to be avoided; the initial negative impression is then left unchallenged. Denrell further stated that, it is only in situations where further interaction occurs in spite of a negative first impression (such as in a work or school scenario where interaction is required regardless of personal preferences) that an initial negative impression is challenged, and then only to the extent that the mandated interaction requires; if, however, there is sufficient interaction, the negative first impression is usually altered, and becomes a positive impression.

Stigma characterizes individuals as imperfect and degraded; it generates discrimination in employment, housing, medical care, and social relationships

(Rosenfield, 1997). Having a record of psychiatric treatment and institutionalization can have a negative effect on how the character of that person is perceived by others. Most people with mental illnesses are stigmatized and often suffer antagonistic consequences such as increased social segregation, lack of opportunities to work, and the inability to access treatment (Rosenfeld, 1997). There are low employment rates among people with mental health issues (Hayward & Bright, 1997). Conversely, some people with mental health diagnoses can have problems that affect their working life. In schizophrenia, for example, poor concentration can be a particular problem (Hickling et al., 2011). Nonetheless, rates of employment among people with this disorder vary greatly between countries, so mental illness alone cannot explain low work rates (Thornicroft, 2012).

Those people with mental illness may be exposed to prejudice and discrimination from others (received stigma), as well as adopting feelings of devaluation (self-stigma) (Jackson & Heatherington, 2006). In society, stigma has been associated with low access to services, and insufficient funding for mental health research and treatment of institutional stigma (Jorm & Griffiths, 2010). Public stigma exposes a social and cultural background with undesirable community attitudes that affect every day, professional, and official reactions (Kitchener & Jorm, 2002). Recent evidence in the United States showed that researchers found no progress in discrimination toward people with serious mental health conditions or substance abuse problems, and in some cases discrimination may even be getting worse (Pescosolido et al., 2010).

Public Stigmatization of Mental Illness

In relation to mental illness, Jones et al. (1984) noted that stigma occurs when a sign links a person through attributional processes to unattractive features that shame them. There are six measures of stigma:

1. Conceal-ability: How observable a characteristic is to others.
2. Course: Is the difference for life or changeable?
3. Disruptiveness: The effect of the difference on social interactions and relationships.
4. Aesthetics: Does the difference produce aversion or is it seen as unpleasant?
5. Origin: Is the individual seen as responsible for this difference?
6. Peril: Does the difference produce feelings of risk in others? (Pescosolido et al., 2010, pp. 214-218)

From these six categories, stigma takes place when the mark links the identified person through attributional processes to unwanted characteristics that may damage his or her reputation.

Evidence suggests that stigmatizing attitudes about people with mental illness are widely held by the general population in the Western world, with studies supporting these findings in the United States and many Western European countries. Additionally, these views are not restricted to members of the general population; even professionals from mental health fields contribute to stereotypes about mental illness (Corrigan & Watson, 2002). In the United States, the DHHS Surgeon General's report (1999) highlighted the fact that a very low rate of people with mental illness accessed services, along with a shortage of resources, and continuing high rates of prejudice and discrimination toward

individuals with mental health conditions. The report saw scientific research as a possible deterrent against stigma in that if evidence presented mental illnesses as brain-based disorders, it would liberate people from misconceptions. Some commercial advertisements ensued, relating mental illness to brain-based etiologies with this very goal.

Pescosolido et al. (2010) studied public attitudes of schizophrenia, major depression, and alcohol dependence between 1996 and 2006. They found that despite the advances in public knowledge, there were no significant decreases in public instances of stigmatization, with little change in attitudes toward stigma (Pescosolido et al., 2010). A majority of the public continued to voice reluctance to work or socialize with a person with schizophrenia or alcohol dependence or to have a person with these problems marry into their family (Pescosolido et al., 2010). The findings also showed that significantly more respondents in 2006 than 1996 reported an aversion to having someone with schizophrenia as a neighbor or to having someone with alcohol dependence marry into their family. Additionally, a majority of the sample associated violence with schizophrenia and alcohol dependence. While stigmatizing reactions did not significantly decrease for attitudes toward depression, levels were lower to some degree (Pescosolido et al., 2010).

Angermeyer and Matschinger (2005) found similar results in the German population. Regardless of increases in public mental health literacy and the endorsement of neurobiological causation, there was neither change nor growth in public stigmatization of mental illness. The appreciation and recognition of neurobiological factors in causing mental illness was also associated with maintaining a social distance

(i.e., a lack of befriending). Jorm and Griffiths' (2008) research in Austria also replicated the finding that neurobiological causation literacy has little effect on public stigmatization of mental illness, although it had no influence on social distance. Mann and Himelein (2004) surveyed undergraduate students to examine the effect of diagnosis, attitudes about treatment, and psychiatric language on stigma connected with mental illness. They found stigmatization of schizophrenia was significantly higher than stigmatization of depression; in addition, fewer stigmas were attached to disorders that could be treated. Further, some studies encompassed a much wider spectrum of mental health disorders including eating disorders, social phobia, posttraumatic stress disorder, and anxiety disorders, revealing variations not only among how different disorders are perceived but also in terms of the different dimensions of stigma (e.g. Granello & Granello, 2000; Jorm & Wright, 2008; Samouilhan & Seabi, 2010).

Anglin et al. (2006) examined the stigma of mental illness within ethnic minority groups. They found that Black individuals were more likely to believe that people living with a mental illness are dangerous and more likely than Caucasians to believe that individuals with schizophrenia or major depression could become violent toward others. They also found that Black individuals were less likely than Caucasians to believe that people with mental illness should be blamed or punished for violent behaviors; these perceptions of ethnic differences were not due to socio-demographic factors. Their results, however, showed that stigma is a complex process and that any interventions aimed at educating the public regarding mental health should consider cultural differences in the perceptions of mental health and the level of stigma imposed upon people with mental health problems.

The motives of individuals with mental illness are often considered mysterious or strange by the general population, which serves to increase speculation regarding the determinants of mental illness behavior patterns, resulting in assumptions (Kessler et al., 2003; Wahl, 2003). It seems to matter little that far more people will suffer from mental health problems during their lives than due to clinically significant chronic physical disorders (Kessler et al., 2005). It does not seem to matter that the motivations of people with mental health issues are only very rarely different from those of anyone else (Wahl, 2003). The aforementioned media images help to support, perpetuate, and reinforce the stigma associated with mental health problems, and interfere with people both acknowledging that they may need help and then accepting the risk of "discovery" that comes with seeking help. Ironically, sensational media reports may be perpetuating the very events that they report and decry (Corrigan et al., 2004).

Some media organizations appear to be altering their coverage of mental health issues. Reporting in Australia, for example, is notable for an increase in factual styles of presentation and a minimization of sensationalist views that might encourage a negative perception of those with mental illness (Francis et al., 2004). Gary (2005) proposed that ethnic minority groups, which already face issues of prejudice and discrimination due to their minority status, face a double stigma when it comes to mental health problems. The burden of this double stigma may prevent mentally ill Black people from seeking treatment and help when it is needed. Gary argued that the stigma of mental illness, combined with racial discrimination, could be a virtually impenetrable barrier to mentally ill people receiving help.

In the United States, Conner et al. (2010) investigated the effects of stigma on people's access to mental health treatment with the hypothesis that stigma mediates the relationship between attitudes towards mental health treatment and race in older Blacks and White adults. They found that Black individuals were more likely to have negative attitudes toward mental health treatment than Caucasian individuals were, with the relationship between attitudes toward mental health treatment being partially mediated by internalized stigma; this suggests that internalized stigma may cause Black adults to develop negative attitudes about mental health treatment. As they stated, this finding of ethnic differences in the implications of stigma for accessing mental health treatment should be addressed at the level of social work and community psychology.

Researchers also showed that while attitudes toward mental illness fluctuate among non-Western cultures, the stigma of mental illness may not be as acute as in Western cultures (Corrigan & Watson, 2002). Fabrega (1991) suggested that an important consideration is the modest segregation between psychiatric and non-psychiatric illness in the major non-Western medical traditions; and if stigmatization occurs in these cultures, it is mostly connected to more enduring forms of illness that are difficult to treat. The research highlighted the virtual absence of stigma in Islamic societies. De Toledo Piza Peluso and Blay (2004) conducted a research review of public perceptions of mental disorder in Latin America and the Caribbean. Overall, they found no significant differences between the perceptions of mental illness in Caribbean and Latin American countries compared to developed countries. They also found that for the 20-year period they reviewed there is a general international trend toward more positive

attitudes regarding mental disorders, especially among more educated and affluent classes.

Mental Illness in Jamaica

There have been substantial attempts to educate the public in Jamaica about mental illness and its treatment through popular media (Hickling et al., 2011). However, researchers found that stigma in Jamaica, although improving, is still evident (Arthur et al., 2010; Gibson et al., 2008; Hickling et al., 2011; Francis, 2007); stigma continues even in the younger population (Jackson & Heatherington, 2006). Stigmatizing attitudes inhibit the utilization of mental health support (Arthur et al. 2010); in addition to evidence suggesting that Jamaicans are less likely than other populations to seek help for mental disorders (Yorke, 2007). The issue of stigmatization attitudes is particularly relevant considering that Jamaica has a considerably young population, with an average age of 24 years (World Factbook, 2012). Researchers point out results that indicate great concern about mental illness in the young Jamaican population (Verhulst et al., 2003 as cited in Smith & Ashiabi, 2007). The issues of mental illnesses are compounded by other social and economic problems such as poverty and crime in particular areas within the country. Because Jamaica represents a Western nation at the lower end of personal income, issues surrounding mental health attitudes and perceptions have been explored over recent decades in detail. The following section describes the mental health system and its processes in Jamaica.

Since achieving independence from the United Kingdom in 1962, Jamaica made substantial public policy changes to its mental health services, including developing a community mental health service, major deinstitutionalization of the single mental

hospital, and profound reorganizing of the country's mental health legislation (Kukoyi et al., 2010; McKenzie, 2008). Substantial attempts to educate the public about mental illness and its treatment have also been employed through popular media. Hence, significant changes have occurred in mental health care in the Caribbean since early reports (Hickling et al. 2011). However, very few studies have examined whether substantial changes in regulations, along with significant efforts to inform and educate the Jamaican population about mental illness, have reduced stigma. The next section focuses on the prevalence of mental illness in Jamaica and discusses attitudes, the existence of stigma in the Jamaican public, and evaluates whether mental health education affected the social acceptability of mental illness.

Jamaica is a small island nation in the Caribbean, with a population of 2.9 million (Miller, 2002). It has had a stable democracy since it attained independence from Britain in 1962 (Reid, 2011). The World Bank classifies the country's economy as Lower Middle Income (McKenzie, 2008). The age structure of the population stands at 30% between 0-14 years, 62% between 15-64 years, and 8% aged 65 or over (Smith & Ashiabi, 2007). Overall, there is a relatively young population with an average age of 24 years (World Factbook, 2012). However, the island scores low on many social indicators. There is widespread poverty and a widening social gap between the rich and poor, as evidenced by concentrations of extreme wealth, a shrinking middle class, and a stagnant economy. Unemployment rates in those aged 15 – 24 years is particularly high at 27%. The incidence of AIDS/HIV was estimated at 1.7% in 2009 and is concentrated among the poor (World Factbook, 2012). The adolescent birth rate is high, with 85% of

Jamaican babies born to unmarried mothers and 50% without a registered father (World Factbook, 2012).

In Jamaica, epidemiological studies showed that the most prevalent mental disorder is Major Depressive Disorder (MDD) (Whitley & Hickling, 2007). However, schizophrenia is the most prevalent disorder that is diagnosed and treated; patients admitted to the mental health hospital are diagnosed primarily with schizophrenia (79%) and Mood Affective Disorder (10%). Thirty-seven percent of the patients treated at the mental hospital were female (WHO, 2009). Whitley and Hickling indicated that in the Mental health outpatient facilities, the majority of users were women (45%) and 19% of outpatients were children and adolescents. In these facilities, individuals were primarily diagnosed with schizophrenia (51%) and Mood Affective Disorder (36%) (WHO, 2009). There are two community-based psychiatric inpatient units in Jamaica, in which 41% of admissions are female. Those admitted to community-based psychiatric inpatient units for 2007 were mainly from the diagnostic categories of neurotic, stress-related and somatoform disorders (32%), and schizophrenia (46%) (WHO, 2009).

UNICEF (2006) estimated that 37,000 Jamaican children were living with at least one of several types of disability, including mental retardation and learning disability. Furthermore, the paper highlighted the stigma and harshness that such children encounter. In a 2005 study, Strohchein found that many parents supposed the birth of a disabled child had paranormal influences. Researchers showed a continual link between economic deprivation and children's socio-emotional well-being. Poor youth display higher rates of aggressive behaviors and mental health issues (e.g., social withdrawal, mood problems, and depression) than more wealthy peers do (Smith & Ashiabi, 2007).

Some authors maintained that the poor were more liable to be defined as mentally ill when they had the same symptoms as their more prosperous colleagues, and found associations between hardship and mental illness. Strohschein (2005) used data from an American survey and examined the psychosocial position of more than 7,000 children. The researcher found that long-lasting poverty is connected with higher degrees of psychiatric difficulties and antisocial behaviors; as family earnings increase, children's mental health, and behavioral problems decline.

Smith and Ashiabi (2007) found that in Jamaica, between 1996 and 1998, the frequency of suicide among adolescents increased twofold and in 1998, 31% of all reported suicides were adolescents. A cross-cultural study of seven countries rating self-reported behavioral and emotional problems in adolescents (11-18 years) found that Jamaica was one of the countries where young people displayed the highest rates of emotional and behavioral problems (Smith & Ashiabi, 2007). Females described more internalizing behavior difficulties, while males stated more externalizing behavior problems (Verhulst et al., as cited in Smith & Ashiabi, 2007).

More recently, Kukoyi et al. (2010) examined risk factors associated with the presence of suicidal ideation and suicide attempts in Jamaican adolescents. They found that by undertaking a cross-sectional study of 342 adolescents (10-19 years) from 19 schools in Jamaica, there was a high rate (58.7%) of mental health problems among adolescents; with 24.7% reporting a suicide attempt. They further indicated that causal factors for attempted suicide included a history of family violence, a history of sexual abuse, and a history of depression. They concluded that there were powerful contributory

factors to mental illness among adolescents in Jamaica, including sexual abuse, poor education, and lack of social contact.

McGoldrick et al. (2005) noted that many Jamaicans did not like to address mental health problems, rarely use the term "depressed" or "anxious," or see these issues as disorders needing therapy; Jamaicans are more likely to understand them as medical or spiritual disturbances. According to Millwood (2011), most Jamaicans view psycho-spiritual illness as a numinous etiology treated by seeking folk remedies, which consist of a spiritual basis to counter evil forces. McDermott (2002) pointed out that for many years, Jamaicans utilized folk healing as a treatment for mental or physical disturbances. The next section considers attitudes to mental health and whether these have improved because of the attempts to reduce stigmatization.

Stigmatization of Mental Illness in Jamaica

The Jamaican government deinstitutionalized its mental health care system with advocacy groups set up to educate the public regarding mental health issues (WHO, 2009), and to have education as a fundamental part of overcoming the stigma attached to mental illness (Corrigan et al., 2002). Overcoming stigma in this manner in the context of legislation by the Jamaican Government is problematic, in that the legislation classifies mental illness as an impairment of the individual's capacity to be socially responsible (Arthur et al., 2010).

The Jamaican government explicitly limits the definition of mental illness to severe diagnoses that can be linked to aggressiveness, unruly conduct, and crime (Arthur et al., 2010). As in the United States, deinstitutionalization, together with the expansion of mental health facilities in the community, brought a major increase in the number of

mentally ill persons becoming homeless in Jamaica. This was primarily due to a lack of services and accommodations for new patients in need of care. This made a once hidden social problem evident to the public, increasing their contact with mentally ill persons (Hickling et al., 2011). In a national survey on mental health, 66.4% of respondents admitted to actively avoiding people with mental illness, and 74.7% of respondents stated that they did not feel comfortable with people who had mental illness (Gibson et al., 2008). More than 7% of respondents to the same survey admitted targeting people with mental illness for both verbal and physical attacks (Gibson et al., 2008). In fact, the prevalence of severe mental illnesses that may result in aggressive behavior is low in Jamaica, with people more likely to assault a person with mental illness than be assaulted by one.

Gibson et al. (2008) argued that the culture of stigma that is associated with mental illness was intense when people who are victims of stigma act negatively toward others who are stigmatized. They examined the internalization and consequent stigmatization of others by people who are themselves victims of stigma. In the study, they used data from a national survey undertaken in 2006 on mental health, analyzing demographic variables, the presence or absence of mental health in respondents, and the attitudes of all respondents to mental health. They found that family members of people with mental illness were less likely to stigmatize others, whereas people who themselves were mentally ill were just as likely to exhibit stigmatizing attitudes and behaviors as the population in general. The researchers concluded that interaction with people with mental illness reduces stigma, offering a more accurate alternative viewpoint than the attitude of fear toward the mentally ill found in the rest of the population. Hinshaw

(2007)also indicated that when an individual's self-esteem declines, he or she has a higher tendency to express prejudice; also for some people, prejudice is a way of upholding their self-confidence. According to Hinshaw, it may be possible to reduce prejudice by merely enhancing a person's self-esteem (Hinshaw, 2007).

Arthur et al. (2010) explored the stigma of mental health in Jamaica and its relationship with the utilization of mental health care services. The researchers found that stigma could be subtle and can interact in unique ways with Jamaican cultural norms, and even with local and idiosyncratic nuances in the meaning of common terms like *madness* and *mental illness*. The researchers established that different people have differing understandings of the term *stigma*, leading to different emotional responses toward people living with mental illness. They indicated that different understandings of mental health dictate the behavioral approaches people take towards the mentally ill and fall along a spectrum that includes fear, avoidance, approaching with caution, or feeling pity, among others. These varying definitions and understandings of words and concepts undoubtedly influenced the perceptions of, and beliefs about, mental illness in Jamaica.

A qualitative study by Hickling et al. (2011) examined whether deinstitutionalization and the integration of mental health services reduced stigma associated with mental illness. In the participants' accounts, the researchers identified a number of issues. Firstly, the researchers found that Bellevue Mental Hospital was a negative symbol of mental health care, where to a great extent stigma originated with associations of irreversible mental illness. They also found that despite the legislative changes to mental care, these connections seemed to be well established and attached to any person receiving treatment in secure care however, participants distinguished levels

of mental illness depending on whether treatment was received in secure care or at a walk-in clinic.

Secondly, Hickling et al. (2011) indicated that a main factor which influenced stigma was the dehumanization of persons with mental illness who were living on the streets; homelessness seemed connected to mental illness and stigma was generated by the connotation of homelessness with dirtiness, prompting reactions of disgust and avoidance; together with this was a widespread prejudgment that the mentally ill are unpredictable and dangerous. They found that even though participants recognized these views as unfair and biased, the stigma was evident; one aspect of stigma that was present in the attitudes of relatives was the belief that people with mental illness are prone to violence. The survey did not ask the respondents the nature of their family member's mental disorder but simply whether they had a relative with a mental disorder (Hickling et al., 2011). Gibson et al. (2008) speculated that the respondents might have reserved the label "mental illness" for "relatives, who exhibited the most disruptive, and therefore potentially dangerous, behavior," which would explain why they viewed individuals with mental illness as threatening (p. 31). The researchers also acknowledged that mental illness would have been underreported, perhaps because of perceived social stigma. In addition to viewing the person as dangerous, the only other negative attitudes expressed by the respondents were disgust (43.1%) and anger (36.9%). Despite these negative emotions, the relatives endorsed few stigmatizing beliefs, causing the researchers to recommend contact with individuals with mental illness as a strategy for reducing social stigma.

Jackson and Heatherington (2006) observed that a factor analysis showed the students' responses to be especially negative if they viewed mentally ill people in Jamaica as lazy or irresponsible. During the debriefing session, the students described mentally ill individuals as "dirty," "smelly," "half-naked men" who wore "torn-up clothes," and in some instances were "throwing stones at you" and "eating out of garbage cans" as well as talking to themselves or to invisible companions (p. 573). These descriptions reflect what some observers have seen as the negative side of deinstitutionalization, the aberrant behaviors that were traditionally hidden and now exposed, reinforcing social stereotypes about mental illness (Gibson et al., 2008).

According to Jackson and Heatherington (2006), of the socio-demographic characteristics, socio-economic status (SES) had a broad and powerful impact on the students' attitudes toward mental illness. They found that students from lower SES backgrounds were less predisposed to endorse socially restrictive attitudes or relate mental illness to lack of willpower. They attributed this to greater awareness of the impact of stressors such as poverty and violence on psychological health, and perhaps placing less emphasis on independence and personal accountability, which are more reflective of middle and upper class values. In addition, Jackson and Heatherington (2006) stated that youth in economically disadvantaged neighborhoods are more likely to see homeless mentally ill people on the street. The researchers noted that students from rural communities, who may be least likely to encounter mentally ill individuals, exhibited less benevolent attitudes. The pattern offered some evidence for the positive effect of social contact on attitudes toward mentally ill individuals (Corrigan et al., 2001), but also showed that contact exposes the public to "homeless, sometimes threatening

mentally ill street people," whose appearance and demeanor may reinforce stereotypes and stigma, particularly related to dangerousness.

Jamaican students' attitudes, including the pattern for SES, parallel the findings reported in other countries. Jackson and Heatherington (2006) advocated the implementation of anti-stigma programs for Jamaican youth. Santor, Poulin, LeBlanc, and Kusumakar (2007) described an effective program for middle school students that could easily be adapted to different age groups and educational settings. Finally, a notable finding of the study was caring and thoughtful demonstrations toward people with mental illness by many participants due to experiences in communities with those who have problems. Interestingly, one participant revealed the contradictory change in community members' views of mental illness when she provided a homeless man with clothes. The authors noted that these positive statements and comments in relation to mental illness have important implications for ongoing public education (Santor et al., 2007).

Whitley and Hickling (2007) examined media representations of mental illness and psychiatric deinstitutionalization in Jamaica; they concluded that the media provides a non-stigmatizing viewpoint that opposes the government's own definition that emphasizes severe mental illness, aggression, and psychosis. They also established in their analysis of all Jamaican print media for a 26-month period that the stories regarding psychiatric deinstitutionalization in Jamaica were positive. In the articles the researchers analyzed, newspaper reporters prioritized the views of experts and translated relevant and positive research findings into lay language so that readers could interpret and understand the findings. As the researchers stated, it may be somewhat surprising that negative

attitudes toward mental illness remain in Jamaica, given the media's openness and positive attitude toward these issues.

In summary of this section, review of the researches would indicate that stigmatization of people with mental health issues in Jamaica remains; however, there seemed to be a reduction of stigma due to legislative changes and educational drives through community-based projects and local media (Arthur et al., 2010; Hickling et al., 2011). Where stigma remained, there was a link to homelessness, danger, and custodial care (Santor et al., 2007). Degrees of stigma were dependent on the type of treatment a person receives, the definition of stigma, visual representations, and how much the disorder was attributed to the person's own deficiencies (Corrigan, Rafacz, & Rüsch, 2011). The proportion of mental health issues in the younger population and the continuing stigma of mental illness are of particular concern in regards to this younger cohort (Gibson et al., 2008). In the next section, I explore the issue of changing attitudes and the role of education.

Changing Attitudes toward Mental Illness

As considered earlier, stigma refers to an attitude toward mental illness that can result in prejudice and discrimination against individuals suffering with mental disorders. In this section, I discuss the theories of attitude and cognitive functions in relation to behavioral changes. I consider the germane studies in the context of providing a grounded theoretical framework in understanding the changes of the mental state of an individual.

Attitudinal and Cognitive Theories

An attitude is a favorable or unfavorable evaluative reaction exhibited in beliefs, feelings, or intended behavior (Breckler & Wiggins, 1989). According to Crano and Prislin (2010), it is a social orientation – an underlying inclination to respond to something either favorably or unfavorably. Attitudes consist of three components: (a) cognitive – our thoughts, beliefs, and ideas about something. When a human being is the object of an attitude, the cognitive component is frequently a stereotype e.g., people with mental disorders are dangerous; (b) affective – feelings or emotions that something evokes e.g., fear, sympathy, hate; (c) behavioral – a bias to act in certain ways e.g., to avoid people with mental illnesses (Crano & Prislin, 2010). In the context of stereotypes, the concept of attitude is defined as "mental and neural representation, organized through experience, exerting a directive or dynamic influence on behavior" (Breckler & Wiggins, 1989, p. 409).

Whereas stereotypes are collections of characteristics associated with members of a group, attitudes are the mental representations of those characteristics, the understanding of what those characteristics mean, how they need to be responded to, and how one feels about them (Fazio & Zanna, 1978). Attitudes are the existing mental representations of characteristics that can comprise a stereotype, and these characteristics may be positive or negative or may prompt specific behaviors, including discriminatory behaviors (Wojnowicz, Ferguson, Dale, & Spivey, 2009). For instance, an individual diagnosed with mental illness received stereotyping perceptions (e.g., unreliable and lazy), which discriminates them to participate in social activities.

People are not born with particular attitudes; they develop attitudes through experience. One can develop attitudes based on descriptions of others' experiences, stories, or an association with other things (Fazio & Zanna, 1978). It would be reasonable to believe that stereotypes, prejudices, and discrimination are connected. Stereotypes lead to detrimental attitudes that consequently end in discriminatory practices (Wojnowicz et al., 2009). In reality, the links between attitudes, association, and behavior reflect complicated processes (Hinshaw, 2007). It is possible for someone to express stereotyped beliefs (e.g., people with mental illnesses are unpredictable) or prejudicial attitudes (e.g., people with mental illnesses have themselves to blame) while having contact with a representative of this denigrated group (e.g., a friend at college with a mental illness; Wojnowicz, Ferguson, Dale, & Spivey, 2009). People's attitudes about the groups as a whole may not apply to individual members of that group (Hinshaw, 2007).

Katz (1960) recommended a functionalist theory of attitudes, stating that attitudes are controlled by how they operate and work for us. People embrace particular attitudes because these attitudes help them attain their key purposes (Crano & Prislin, 2010). According to Katz (1960), learning theory (which describes attitude formation) suggests that attitudes can be learned in several ways. The theorist further states that one way in which attitudes are developed is under the pressure of social norm; people learn how to behave within a particular society by observing the behaviors of others and learning the social norms. Some social norms are universal and are clearly functional whereas others are culture-bound and seemingly arbitrary (Fehr & Fischbacher, 2004).

According to Simon et al. (2004), consistency theories hypothesize that, should contradictions develop among perceptions, people are driven to reestablish agreement; cognitive consistency states that a person attempts to ensure that his or her opinions, beliefs, and attitudes are consistent with one another and with his or her own experiences, knowledge, and behavior. The researchers concluded that is may be achieved by altering attitudes, but may also be achieved by rejecting contradictory evidence or altering how evidence is evaluated. At its very basic level, cognitive consistency is a mechanism to ensure that people behave in a manner consistent with what they know. Thus, attitudes can be sustained despite convincing evidence to the contrary.

Cognitive dissonance forms a part of cognitive consistency theory and describes the mental discomfort that occurs in trying to hold two contradictory viewpoints simultaneously (Festinger, 1957; Simon et al., 2004). Fetinger originally outlined that cognitive dissonance theory implies that an individual holds two incompatible thoughts. The simultaneous presence of these two thoughts causes dissonance, a distressing mental sensation, resulting in a drive to reduce the dissonance. The individual then applies techniques to reduce the dissonance, which can include changing attitudes and beliefs. More recent research showed that dissonance can be induced not only by an individual's contradictory behaviors or statements, but also by witnessing such behaviors in others (Norton et al., 2003). Trivialization is a simple method of reducing dissonance. If the cognitive inconsistency is perceived to be unimportant, then the dissonance is reduced (Simon, Greenberg, & Brehm, 1995).

Cognitive dissonance is also impacted by the attitudes and support, or lack of these, received from a group (Norton et al., 2003). Finding that a group disagrees with

one's own viewpoint can result in dissonance-reducing responses, such as altering one's own views, seeking to persuade others, or simply finding a more supportive group (Matz & Wood, 2005). Individuals with mental health problems may be perceived as unpredictable in their behavior by an observer, though interacting with an individual with mental health problems may in fact challenge this belief (Simon et al., 1995). The individual is likely to underestimate the extent of mental illness to maintain the idea that unpredictability is strongly associated with mental illness in general (Matz & Wood, 2005).

Fischer, Jonas, Frey, & Kastenmüller (2008) reported that there are tendencies to ignore, reject, or negatively evaluate information that contradicts our currently held beliefs results in confirmation bias. People restrict their intake of information to that which reinforces what they already hold to be true. They stated that overcoming confirmation bias by presenting contradictory information in a non-threatening or non-judgmental manner is one of the challenges of altering attitudes and changing beliefs; in the context of mental health, this is a difficult process to achieve. The researchers further stated that a reduction in negative perceptions of mental illness in the media is one way in which this process has been facilitated. According to Wood (2000), attitudes do not, in general, spontaneously change; it is possible for a person to evaluate his or her own attitudes and choose to alter them, but even then it is likely that a person would be prompted by an external impetus to begin such a reevaluation. Willingness and ability to change one's attitudes are related to a number of individual factors. Openness to experience is correlated with a greater willingness to challenge and change one's stereotyped views (Flynn, 2005). People who hold attitudes that are more prejudiced

spend more mental effort trying to reason and understand when confronted with information that challenges their attitudes than people whose attitudes are less prejudiced (Wood, 2000). This cognitive effort may be due to attempts to explain the challenging information and defend the prejudice without having to alter it (Sherman, Stroessner, Conrey, & Azam, 2005). Individuals who volunteer to work with those suffering from mental health problems often have fewer prejudices and are more open to change their attitudes toward the mentally ill because of the close contact and challenge to their stereotyped views (Flynn, 2005; Wood, 2000).

Attitude Change

People understand information that they receive in the context of what they already know – this is one of the fundamental mechanisms of learning (Matz & Wood, 2005). Anything new that people learn is incorporated into their current understanding and knowledge of the world (Flynn, 2005; Gawronski & Bodenhausen, 2006; Matz & Wood, 2005). Consequently, they interpret information they are given in relation to what they already know and believe (Sarnoff & Katz, 1954). In spite of factors that serve to resist attitude change, it would be maladaptive if there were no cognitive mechanisms to allow attitudes to be changed (Rogers & Mewborn, 1976; Sarnoff & Katz, 1954). Researchers indicated that multiple factors influence how received information is evaluated; these factors vary between people and vary at different times and in different contexts for the same person (e.g., Gawronski & Strack, 2004; Edwards, 1990; Flynn, 2005; Gawronski & Bodenhausen, 2006; Matz & Wood, 2005; McGregor, 2003; Rogers & Mewborn, 1976; Sarnoff & Katz, 1954; Stone, 2003; Stone & Cooper, 2001).

Facts can be persuasive for some people, but this does not mean that facts alone are sufficient, or even necessary, for persuasion (Sarnoff & Katz, 1954). The simple fact that there are people who believe things in spite of the absence of evidence, the existence of conflicting evidence, or even the presence of overwhelming disproof, should make it apparent that the routes to persuasion are multiple, complex, and often not rational (Flynn, 2005; Gawronski & Bodenhausen, 2006). Sarnoff and Katz stated that, for a broadly effective method of attitude change, straightforward facts should comprise part of the process; for instance, contextualizing the incidence of substance abuse among those with mental illness can help minimize stigma and challenge attitudes. They further stated that, statistics need to be presented in a factual manner, but with an emphasis on other risk factors involved in order to provide a more complete analysis of the problem.

Learning Context and Attitude Change

Different people evaluate the same evidence in differing ways, and the same person might evaluate the same evidence in differing ways depending on the context in which it is presented (Stone & Cooper, 2003). The two primary routes through which evidence is evaluated are deep and shallow processing (Graham & Golan, 1991; Saegert & Young, 1981). Shallow processing involves a cursory evaluation of presented facts, and relies more on affective cues (e.g., cheerful music, bright colors, and happy expressions) than on the information itself. Social and associative cues are also significant in shallow processing (Graham & Golan, 1991). If the information is implied to elicit positive social responses, or is associated with something that the individual finds pleasing or desirable, this can be more persuasive (Nordhielm, 2002). Hence, in attempting to address public perceptions about mental illness, information needs to be

presented in an informative and pleasing way in order to maximize the persuasiveness of the message.

Deep processing entails a thoughtful analysis of the information presented and the arguments advanced (Saegert & Young, 1981). Emotional cues are less significant in deep processing, as are social associations (Nordhielm, 2002). According to Graham and Golan (1991), deep processing is also less personal and more logical; the more personally involved or invested a person is in the subject being discussed, the less likely he or she is to use deep processing. Shallow processing is much faster and attitude change occurs much more quickly, but it is less profound. Deep processing takes more time – both to present the information and for the individual to process and consider it – and attitude change occurs more slowly (Saegert & Young, 1981). However, once the attitude change has occurred, it is longer lasting, less impacted by later emotional states, and less likely to be altered by non-factual information (e.g., celebrity endorsements). Direct interaction with individuals suffering from mental illness can increase the personal nature of attitude change (Stone & Cooper, 2003). In addition, an emphasis on case studies and true stories can help humanize and personalize the relevant issues, increasing the impact of the message in mental health settings (Graham & Golan, 1991; Saegert & Young, 1981).

Persuasion and attitude change are not only a matter of reasoning. The individual emotional impact of the information presented and how it is presented can be just as powerful as the factual content (Saegert & Young, 1981). Emotionally charged charity television advertisements are an obvious example of this. People in general want to feel happy, and want to avoid feeling painful emotions such as sadness, guilt, or fear (Stone & Cooper 2003). An argument that elicits and manipulates such emotions, whether

intentionally or not, can be considerably more persuasive in altering attitudes and altering behaviors than one that does not (Gawronski & Bodenhausen, 2006). The impact of mental illness and associated perceptions on a patient, presented in an advertisement, can induce an emotional response, again suggesting that a personalized approach can lead to more persuasive reasoning.

Attitude Change toward Mental Illness

In a Serbian study, researchers examined the effect of an education program on the attitudes of students toward mental health (Pejović-Milovancević, Lecić-Tosevski, Tenjović, Popović-Deusić & Draganić-Gajić, 2009). After six months, the authors found that discrimination and the trend toward social control were reduced while awareness of mental health-related problems increased among young people (Pejović-Milovancević et al., 2009). In the United Kingdom, Naylor, Cowie, Walters, Talamelli, and Dawkins (2009) evaluated the influence of a mental health teaching program on adolescent pupils' perceptions. The researchers found that teaching 14- and 15-year-olds about mental health problems helped reduce stigma by adding knowledge and encouraging positive attitudes.

Stuart, Koller, Christie, and Pietrus (2011) evaluated results of a contact-based educational intervention carried out as part of the youth scheme to reduce stigma among journalism students in Canada. The intervention was a half-day seminar that brought students into contact with three presenters who had personal experience with mental illness. The results showed a statistically significant reduction in stigma, noting an improvement concerning attributions of danger and unpredictability (Stuart et al., 2011). A large proportion of students testified that the seminar had changed their opinions of

people with a mental disorder. Although the authors noted that this was an uncontrolled study, it would appear that this contact-based intervention had an effect on students' opinions of people with a mental illness. This process of change highlights the importance of a personalized approach to mental health attitude change through deep processing and a high emotional impact. According to the researchers, factual dissemination in this context allows for a strong basis on which to formulate new attitudes and beliefs, while the group work encourages social acceptance of such attitudes and the dissolution of negative perceptions. Hence, such interventions use a variety of techniques to encourage attitude change and highlight the need to address multiple aspects to achieve a satisfactory result.

Jorm et al. (1997) pioneered the use of vignettes describing mental illness symptoms to identify gaps in the mental health knowledge of the general population and target specific points on which the public and mental health professionals diverge. Mental health literacy is based on the philosophy that the public needs knowledge and understanding of the causes of mental disorders, self-help strategies, available professional treatment options with emphasis on dispelling misconceptions about treatments, and knowledge of how to seek mental health information (Jorm, 2000). This means that a broad range of interventions and techniques is required for effective attitude change in reality and case studies/vignettes may be a useful tool in this regard, covering factual and personal aspects of mental illness simultaneously.

Attitudes and stigmatization and their role in seeking treatment for, and interacting with, individuals with mental disorders are essential aspects of mental health literacy. Barney et al. (2006) found that it is not only stigma associated with mental

illness that can prevent people from seeking help, but also the stigma that people with mental illness themselves perceive – even if that perception of stigma is incorrect. According to Jorm, Korten, Jacomb, Rodgers, and Pollitt (1997), mental health professionals need to be particularly aware of the issue of mental health literacy, as the understanding of mental illness in the general population is very different from that of mental health professionals. The researchers indicated that even people who suffer from mental disorders generally possess an understanding of mental illness much closer to that of the general population than that of professionals.

Corrigan et al. (2001) investigated the effects of three popular strategies for altering stigmatizing attitudes toward mental illness: education, contact, and protest. The educational programs were designed to dispel myths about mental illness by challenging them with accurate information, challenging misconceptions in such areas as the relationship between psychotic disorders and violence, homelessness, and independence. The researchers noted that most marked effect of the educational program was on stability attributions; after completing the class the participants were more inclined to agree that individuals with mental disorders could recover with appropriate treatment. A particularly notable finding was the relationship between changes in the participants' attitudes and their perceptions of the group leader. The participants who described the leader as more interesting, credible, and likeable showed the greatest changes in attitudes. This is consistent with Hogan's (2002) emphasis on the behavior of the facilitator in engaging group members and promoting active discussion, and suggests that simply presenting factual information is not an optimal strategy for encouraging attitude change: personal engagement and investment are key ingredients for increasing effectiveness.

Personal engagement and deep processing requirements are vital for attitude change and therefore interventions need to be well constructed and managed in a strong way (Corrigan et al., 2001; Jorm et al., 1997). Strong leadership can encourage the promotion of new social norms and assists in the transition of attitudes; hence, it must be emphasized in such interventions (Corrigan et al., 2001; Hogan, 2002).

Summary

Mental illness is a significant and widespread problem, with the majority of people experiencing a mental illness at some point in their lives – and many others living close to someone who suffers or has suffered from a mental illness. In summation, most of the literature review revealed that stigma associated with mental illness is common and based on stereotypes of people with mental illness that are founded on ignorance or false information. Such stigma can be a significant barrier to those with mental health problems seeking help, which can further exacerbate their suffering.

In this chapter, I provided evidence indicating the global prevalence of people with mental health who were stigmatized. In many developed Western countries, the process of deinstitutionalization and attempts in recent years to educate the public in mental health matters have not been successful in significantly reducing stigmatizing attitudes; recent research indicates that this trend may be rising. There is a pervasive misunderstanding, or lack of understanding, regarding what comprises a mental health problem, what its impact is, and what might be expected of someone who has mental health issues. Mental health problems and mental health care overall remain subjects of ignorance and fear. These factors may be amplified because of conflicting cultural ideologies and influences along with certain socioeconomic backgrounds. For instance,

in Jamaica and other lower-income countries where public resources for the education of the population are fewer, there are likely to be greater negative feelings toward mental illness.

I also presented a summary of research into the development of stereotypes and attitudes – how they are formed, maintained, and changed. Both are developed through experience, observation, and social learning. Based on these studies, social reinforcement and social norms were identified as significant ways in which individual with mental illness could learn the attitudes within the social norms. It is therefore not surprising that social acceptance is a significant process through which attitudes can be altered. Interestingly, it is not necessary for an opinion or attitude to be disapproved of or to lead in reality to social rejection; it is sufficient for a person to believe that this is the case. In other words, it can be sufficient to give the impression that "everyone else is doing it" without this actually being true (Wood, 2000).

Within the mental health context, it is vital that social norms are challenged and modified to encourage a broad change in society. Campaigns that promote employment of those with mental illness are important in this regard, as they encourage employers to reject previous attitudes to this group by demonstrating the employability of individuals with mental health in a variety of contexts. Based on these studies, it was assumed that the attitudes against the individual diagnosed with mental illness could be changed.

In Chapter 3, I explain the methodology for the study, taking into account a quantifiable data inquiry. I then present the research design and its appropriateness for the study; discuss population and selected sampling; and present the procedures involved in data collection, instrumentation, and data analysis. In Chapter 4, I confer the data

analysis, data collection, preliminary analysis, comments on didactic seminar treatment, inferential analysis of each dependent variable, and a summary of findings. In Chapter 5, I discuss the research findings, limitations of the study, and offers recommendation, implication, and conclusion of the study.

Chapter 3: Research Method

Introduction

This chapter includes a description of the design of this study, sample, instrumentation, data analysis, and ethical considerations. An overview of the study's design includes a rationale behind the selection of this particular research design. I present the sample characteristics and size as well as a description of the instrumentation. The data collection process and analysis are also discussed. The purpose of this study was to examine the effect of a didactic seminar on attitudes of Jamaican college students in Jamaica, West Indies toward mental illness. This study would either support or refute the hypothesis that a didactic seminar was effective in changing the attitudes toward people affected by mental illness.

Research Design and Approach

I aimed to examine the effectiveness of a targeted intervention by the college of a didactic seminar on mental illness on a student population in Jamaica in reducing stigma and perceived support available for mental health problems. The objective of employing a didactic seminar was to reduce mental health stigma through effective education. Similar research had not been conducted in Jamaica.

Research Design

This was a nonequivalent control group quasi-experimental design. The design is similar to experimental design but lacks random assignment. The nonequivalent form of quasi-experimental design is a common design (Trochim & Donnelly, 2008). It requires a first survey and second survey for a didactic seminar attendees group and a nonequivalent control group.

Like other research designs, nonequivalent control quasi-experimental design has limitations (Trochim & Donnelly, 2008). Nonrandom assignment and nonequivalent groups present challenges in statistical analysis. In this study, I drew both the didactic seminar attendees and control groups from the same college, which made them similar in socioeconomic status (SES). They were all student teachers, mostly drawn from rural Jamaica; they lived either on the college campus or in communities close to the college. I used the first survey to determine whether the groups were comparable before the didactic seminar intervention by the college.

Threats to Validity

The validity of this research was based on an assumption that the didactic seminar attendees group and the nonequivalent group were comparable before the study. Therefore, second survey group differences could be explained by the didactic seminar intervention by the college. However, that assumption might not have been valid. To test it, I compared the groups using age and gender. Any differences in these variables would be accounted for by including them in the analysis. However, it was possible that there would be group differences on variables measured in this study.

Research Approach

A number of research approaches could be selected. I did not choose a two-group experimental design approach because randomized sampling of participants was not done. Instead, I considered the following pre-experimental and quasi-experimental research approaches: single-group interrupted time-series design, in which measures are taken for a single group before and after treatment; one-group pre-test-post design, in which pre-test measures followed by treatment then post-test for a single group; static

group comparison or post-test-only with nonequivalent groups, in which after treatment, comparison group and didactic seminar attendees group are given post-test; post-test-only with nonequivalent groups design, in which different treatment are given and after treatment, comparison group and didactic seminar attendees group are given post-test; control-group interrupted time-series, in which measures are taken for two groups before and after treatment and only one group gets the treatment; nonequivalent (pre-test and post-test) control-group design, in which the didactic seminar attendees group and the control group are selected without random assignment and both groups take pre-test and post-test, but only the didactic seminar attendees group receives treatment (Creswell, 2009).

I chose a multiple-group approach with the second group being a control group to rule out the single-group threats to internal validity because those threats would be common to both groups and cannot explain why second survey group differences would occur. According to Trochim and Donnelly (2008), the condition of the groups being comparable was assumed; and this assumption could not be fully tested. Hence, I used a nonequivalent control group quasi-experimental design in this study to help determine whether the changes in attitudes between the pre- and posttests were related to the didactic seminar (see Figure 1).

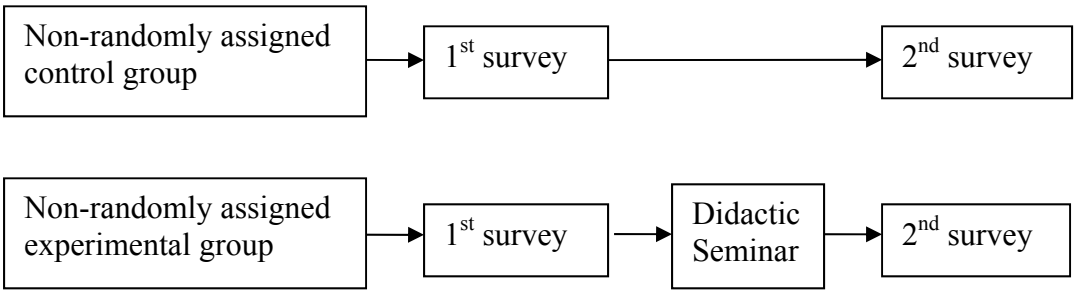

Figure 1. Pre-post design with control group.

The independent variables were attendance at the didactic seminar (yes, no) and gender (male, female); I used first survey scores and age as covariates. First survey is "usually the most highly correlated with the second survey" (Trochim & Donnelly, 2008, p. 203). The use of it as a covariate controlled the variability that occurred because different people had different scores on the first survey. I included age because it may have been related to the dependent variable; in addition, it helped to account for any differences between the two groups. Also, I measured age and gender with questions on the demographic questionnaire. The dependent variables were attitude toward mental illness – measured as the total scores on the Help Seeking Attitude Scale (Fischer & Farina, 1995), Attitudes to Mental Illness Questionnaire (Luty et al., 2006), and the Opinion About Mental Illness Scale (Cohen & Struening, 1964). The didactic seminar was treated as a between-subjects variable. Since repeated measures were obtained from the sample participants (pre-seminar, post seminar), variables were correlated samples (within-subjects) variables.

I conducted the postassessments four weeks after the preassessment to ensure that the didactic seminar had more than a short-term effect. I used a nonequivalent control group design to determine whether the change in attitudes between the pre- and posttest were related to the didactic seminar rather than the passage of time. Only the didactic seminar attendees group participated in the didactic session four weeks prior to the second survey for both groups. The nonequivalent control group included those who participated in the first and second survey but chose not to participate in the didactic seminar. The didactic seminar attendees group included participants who completed the first survey, the didactic seminar, and the second survey.

Methodology

I used a quantitative methodology in this research. All test questionnaires were in the form of surveys. These surveys provided a quantitative description of trends, attitudes, and opinions of the population of college students in Jamaica. Additionally, a first survey followed by didactic seminar and then followed by a second survey approach allowed me to evaluate if a didactic seminar on mental health affected the attitudes of the college students towards mental illness. The first and second surveys utilized the same questionnaires. However, the second survey was given four weeks after the didactic seminar.

Setting and Sample

The research population was a convenience sample drawn from a college in Jamaica. The students at this college were from all parts of Jamaica (see Appendix B for the recruitment flyer). I recruited two hundred college students, which was more than needed and not all of them returned for the second survey. The first survey consisted of all student volunteers. The college presented the didactic seminar, which was open to all students at the college who found time to attend. Volunteer students who chose not to participate in the didactic seminar were allowed to take the second survey and were placed in the nonequivalent control group. Those who chose to participate in the didactic seminar were allowed to take the second survey and were placed in the didactic seminar attendees group**.**

I obtained permission to conduct this research on the college campus from the Principal of the college (see Appendix C). A Principal in a Jamaican college is equivalent to President of a college or university in the United States of America. I also

obtained permission to conduct this research from the Walden Institution Review Board (IRB) before the study began. Subsequently, I launched a campaign at the college to solicit participants for the study. In this research, I selected pparticipants for the following reasons: (a) accessibility, (b) being of age to provide informed consent, and (c) educational level, which would provide them with the necessary reading comprehension skills to complete the questionnaires. The inclusion criteria were: (a) students must be registered at the college and (b) students must be at least 18 years of age or older.

Sampling and Sampling Procedure

I conducted sampling of college students to recruit participants for this research. There are different methods of sampling, of these sampling methods, I applied convenience and nonprobability sampling for this study because it was not feasible or practical to use random sampling (Trochim & Donnelly, 2008). I was able conveniently to gain access to college students by consent of the college administration and faculty. Also, the research was nonprobabilistic because it did not involve random sampling. There was no evidence that the sample would be representative of the population (Trochim & Donnelly, 2008).

The results of Lipsey and Wilson's (1993) meta-analysis of treatment research showed that for "Cognitive therapy, modification of covert self-statements of adult patients; all outcomes," (p. 1183) an effect size of 0.66 with $n = 69$ is achievable. In this research, I utilized a didactic seminar as a cognitive tool to modify the self-assessed attitudes of students. Based on the forgoing effect size outcome, I utilized a minimum effect size of 0.37 in this research. Using this effect size, I conducted a power analysis to determine the number of participants needed in this study (Cohen, 1988) using G*Power

3.1. I examined the hypotheses using ANCOVA. The independent variables were participation in the didactic seminar (yes, no), gender (male, female), and the interaction between these two. I examined first, survey scores and age as covariates. The dependent variables were attitude towards mental illness – measured as scores on the Help Seeking Attitude Scale (Fischer & Farina, 1995), Attitudes to Mental Illness Questionnaire (Luty et al., 2006), and the Opinion About Mental Illness Scale (Cohen & Struening, 1964), after accounting for first survey scores and age.

The α for the ANCOVA model was set at .05. To achieve power of .80 and a medium effect size (f =.37), a total sample size of 128 was required to detect the critical F-value (F [4, 127] = 1.90). A minimum of 64 participants in the control group and 64 participants in the didactic seminar attendees group would be acquired. I sent informed consent and written information (see Appendix C and D) about the study to the principal of the college for distribution to individual teachers who provided them to students.

Procedures for Recruitment, Participation, and Data Collection

A volunteer at the selected college conducted recruitment for this research by means of research flyers distributed at the selected college in Jamaica. The flyer explained the nature of the study, the criteria for participating in the study, and gave my contact information. In addition to research flyers, a teacher read the information on the flyers to the entire student body during devotion, or normal assembly. I presented the Informed Consent during devotion, or normal assembly. Devotion is a time where it is mandatory for all faculties and students to meet to offer devotion and listen to special announcements on a weekly basis. Normal assembly is a time for general announcement to staff and student body on Tuesdays to Fridays. It usually lasts for half an hour.

Students' participation in the study was voluntary in all aspects. The first and second survey participation was from students who chose to collect the consent form and surveys from me while I was alone in the secretary's office. The participants returned the surveys to me within one to two days at the same location. This prevented the interruption, or displacement of any planned educational activities. The college offered the didactic seminar to students after the first survey was taken. Students could attend the didactic seminar without participating in the first survey. The second survey took place four to six weeks after the didactic seminar. Only students who took the first survey were allowed to take the second survey. Both first and second surveys utilized the same questionnaires.

Potential participants of the research were notified of the first survey date, time, and test location during assembly and by flyers posted at the college. I used the same method of notification to announce dates, times, and locations for the second survey. In addition, I sent e-mails to students who volunteered in the first survey to remind them to volunteer for the second survey. Student volunteers met with me at the secretary's office to collect informed consent forms and survey, as well as to return the completed surveys at their convenience, within one to two days. This allowed for privacy of the volunteers. Participants were given the questionnaires on paper after I verified their consent and understanding of the test instructions. Later, I transferred the first and second survey data to the statistical analysis software, SPSS. I coded the data from each test instrument as described in the instrumentation section.

The informed consent form included a brief background of the study, the procedures for participation, a discussion of confidentiality, the voluntary nature of the

study, ethical matters, and request for consent for the second survey portion of the study. I provided a phone number, mailing address, and e-mail address for participants with additional questions regarding their participation in the study to direct them to me. This provided teachers and participants with multiple ways of contacting me.

Didactic Seminar

As part of the research procedure, the didactic seminar included handouts on the definition, causes, types, diagnoses, risk factors, treatment, stigma, etc., of mental illness. The didactic seminar presenter facilitated discussions about mental illness, as outlined in the handouts, and participants were given the opportunity to read and discuss vignettes on mental illness. Didactic seminar attendance was used to determine which group participants were placed in – the didactic seminar attendees group or the nonequivalent control group. I drew the nonequivalent control group from those who opted not to be present at the didactic seminar, whereas I drew the didactic seminar attendees group from participants in the didactic seminar.

The college in Jamaica, West Indies where this research was performed, presented the didactic seminar for one session. The college implemented and oversaw the didactic seminar activity on mental health according to its policies and procedures. The college allowed me to invite students who attended the seminar to complete surveys for the research. The didactic seminar was a customized module of "The Science of Mental Illness" teaching module, produced by Biological Sciences Curriculum Study (BSCS) for the National Institutes of Health and the National Institute of Mental Health (Resch, 2005). I was granted permission for it to be used as an intervention in this research, as customized (see Appendix L). The objective I had for the didactic seminar was to

educate participants on major concepts in mental illness, such as its center of control, symptoms, causes, risk factors, treatment, consequences of no treatment, and stigma. The main goal I had for the seminar was to aid the participants in becoming more knowledgeable in regards to the effect of mental illness when one is stigmatized by it; and to identify the role that one could play in society to aid those that are suffering from mental illness. I intended that the seminar impart coping skills to combat mental illness and to facilitate discussions of participants' understanding of mental illness and scenarios of mental illness in the form of vignettes, based on real-life stories of people diagnosed with the illness. Being knowledgeable about mental illness could dissipate misconceptions and positively affect the way individuals understand mental illness (Resch, 2005).

In this seminar, I also aimed at enhancing students' appreciation of the role their own attitudes and value-systems play as they engaged with others having mental health issues. They could achieve a better understanding of the pervasiveness of diverse mental health disorders among people in Jamaica and the need for decreased stigmatization in their communities. A qualified professional with a Doctorate in Ministry (focus on marriage and family) and a Master of Science in Psychology conducted the seminar.

Instruments

I employed a number of measures to assess whether didactic seminars would change the attitudes of college students in Jamaica towards mental illness and their willingness to seek help for their mental health. These included the Attitudes to Mental Illness Scale (Luty et al., 2006; see Appendix G), the Opinion about Mental Illness Scale (Cohen & Struening, 1964; Luty et al., 2006; see Appendix H), and the Help Seeking

Attitudes Scale (Fischer & Farina, 1995; see Appendix I). I used these scales to assess Hypotheses 1 to 3.

I utilized a demographic questionnaire (see Appendix F) consisting of two questions to collect basic information regarding the participants' age and gender. I used age as a covariate in assessing attitudes toward mental illness; gender as an independent variable in assessing attitudes toward mental illness (see Appendix G); and the demographic questionnaire to assess Hypotheses 1 to 3.

Attitudes to Mental Illness Questionnaire

The AMIQ (Luty et al., 2006) is a 5-item self-administered Likert scale (from -2 to +2, indicating "strongly agree" to "strongly disagree"). It measures components of stigmatized attitudes toward mental illness. The questionnaire presented a vignette describing a stigmatized individual (schizophrenic). An example item was, "I would be comfortable if Michael was my colleague at work." Individual questions were scored on a 5-point Likert scale (maximum +2, minimum -2), with the options "neutral" and "don't know" scored as 0. For three items on the scale, the points for negative items were "strongly agree" = -2, "agree" = -1, "neutral" = 0, "disagree" = +1, "strongly disagree" = +2, "don't know" = 0. The scores were reversed for positive items. For the two negative items on the scale, the points were "very likely" = -2, "quite likely" = -1, "neutral" = 0, "unlikely" = +1, "very unlikely" = +2, "don't know" = 0. The range for the total score for each vignette was -10 to +10. Lower scores indicated more negative attitudes towards mental illness.

The scale was developed to provide a brief snapshot of people's attitudes toward mental illness, and could be quickly adapted to allow responses to specific vignettes or

instances of mental illness. The AMIQ could be used to assess attitudes towards specific mental illnesses, possibly separating attitudes toward psychotic illnesses such as schizophrenia from attitudes toward potentially less-stigmatized disorders such as complex grief. Luty et al. (2006) found test-retest reliability in a sample of 256 participants to be .70; correlation between the AMIQ and an alternate version was high (r = .70, $p < .01$) demonstrating alternate-form reliability (Luty et al., 2006). They and other researchers found that the AMIQ had convergent validity with the OMI and with other measures of stigmatization of mental illness (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003).

Though the AMIQ appeared simply to replicate the OMI, it was significant in being a much shorter scale. Although the AMIQ is a smaller scale, it is uni-dimensional (Luty et al., 2006). Thus, the OMI allowed for a more nuanced analysis of the impacts of various attitudes toward mental illness and people with mental illness, while the AMIQ permitted a succinct snapshot of a participant's overall attitude to mentally ill people in general (positive or negative), without seeking to tap in to the practicalities of the authoritarianism or social restrictiveness subscales, or the value judgments of the benevolence or mental health hygiene subscales on the OMI.

Opinions about Mental Illness Scale

The OMI Scale (Cohen & Struening, 1962, 1964) is a self-response scale comprising 51 items scored on a Likert scale (from 1 to 6 , indicating "strongly disagree" to "strongly agree" for positive items; 6 to 1, indicating "strongly agree" to "strongly disagree" for negative items). An example item is, "There is something about mental patients that makes it easy to tell them from normal people."

The scale is divided into five subscales that measure attitudes and opinions regarding people with mental illness: authoritarianism, benevolence, mental health hygiene ideology, social restrictiveness, and interpersonal etiology (Dielman, Stiefel, & Cattell, 1973). Authoritarianism represents people's beliefs about how people with mental illnesses are different from or inferior to people without mental illness. In this context, authoritarianism described an attitude about how people with mental illnesses should be treated. It contained items assessing belief in a need for restraint, security, and involuntary commitment to in-patient facilities. It also included a belief that thinking or talking about one's problems is unhelpful and should be avoided. An example item was, "A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients." Benevolence represented a moral kindliness toward people with mental illness, but one that could be patronizing and distant.

Mental health hygiene ideology also represented a kind, constructive attitude, but one based on notions of treatment and treatability of mental illness, and a belief that people with mental illness are themselves decent, moral individuals. An example item was, "More tax money should be spent on the care and treatment of people with severe mental illness." Social restrictiveness described a belief that people with mental illness should be controlled or restricted in society. Social restrictiveness included removal of parental rights, restrictions on employment, and even forced sterilization. Interpersonal ideology encompassed beliefs about the causes of mental illness, including the idea that mental illness was caused by parental abuse or avoiding one's own problems.

For each subscale, the points on the scale for positive items were "strongly disagree" = 1, "disagree" = 2, "partly disagree" = 3, "partly agree" = 4, "agree" = 5,

"strongly agree" = 6. The scores were reversed for negative items. On each subscale, lower scores indicated more negative opinions about mental illness, while higher scores indicated more positive opinions. The range of the total score on the subscales were: 17 to 102 for authoritarianism, 8 to 48 for benevolence, 9 to 54 for mental hygiene ideology, 10 to 60 for social restrictiveness, and 7 to 42 for interpersonal etiology, giving an overall OMI score range of 51 to 306. The internal-consistency reliability of the subscales, range from .82 (authoritarianism) to .59 (interpersonal ideology) with a main scale reliability of .75. The scale had convergent validity with the Leary Interpersonal Checklist and Edwards Personal Preference Schedule (Lawton, 1964) and convergent validity with a measure of willingness to seek help with mental illness (Leong & Zachar, 1999). Analysis was conducted on the overall OMI score since scoring on the questionnaire was reversed, where necessary, to maintain consistency so that higher scores means more positive opinions about mental illness.

Help Seeking Attitudes Scale

Fischer and Farina (1995) designed the HSAS is a 10-item scale. They developed it to measure attitudes toward seeking psychological help and it is a one-dimensional version of Fischer and Turner's 29-item scale. Some items on the 10-item scale were slightly modified. However, their psychometrics appeared to match those of the original version with correlated scores of .87. The 10-item attitude toward seeking professional psychological help scale was standardized with samples of university students, similar to the original version.

The 10-item HSAS scale consisted of statements on a 4-point Likert scale. The points on the scale for negative items were "agree" = 0, "partly agree" = 1, "partly

disagree" = 2, "disagree" = 3. The scores were reversed for positive items. The range for the total score of the scale was 0 to 30. Lower scores indicated less willingness to seek professional psychological help, while higher scores indicated more willingness. An example item was, "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." The internal consistency of the 10 items was .84 (Cronbach's alpha), comparable to what Fischer and Turner (1970) obtained for their full scale (that is, .83 and .86, in two samples).

In validating the 10-item HSAS scale, Fischer and Farina (1995) found that "of the total respondents, 154 indicated they had previously experienced a serious emotional or personal problem and briefly described it" (p. 370). Those who sought professional help for problems were 32 (37%) females and 10 (15%) male. "The point of biserial correlation between having sought help or not and the person's scale score was .39 ($p <$ .0001) overall, .24 ($p < .03$) for women and .49 ($p < .0001$) for men" (p. 370). The biserial correlation between gender and attitude score was .30 ($p< .0001$). For women, the mean was 19.08 ($SD = 5.45$; $n = 214$); for men the mean was 15.46 ($SD = 6.00$, $n =$ 175).

The 10-item HSAS scale had a test-retest correlation of .80 ($n = 32$) with a 1-month interval between tests (Fischer & Farina, 1995). The correlation between the old version of the scale and the new 10-item scale was .87 ($n = 62$). According to Fischer and Turner (1970), a factor analysis of the longer scale suggested four dimensions, namely recognition of need for help, tolerance of stigma, interpersonal openness, and confidence in mental health professionals. These four dimensions were collapsed into one in the shorter scale.

Operationalization of Variables

In this research, the dependent variable was attitudes toward mental illness and the independent variables were didactic seminar attendance and gender. I operationalized attitude toward mental illness as how well a participant did on tests regarding thoughts about psychological help and mental illness (Cohen & Struening, 1964; Fischer & Farina, 1995; Luty et al., 2006). I also operationalized didactic seminar attendance as a "yes" or "no" value that indicated attendance at didactic seminar on mental illness and age as the number of years since the individual's birthday (Bowen & Atwood, 2004); and gender as the response to the gender (Male, Female) demographic questions (Haig, 2004).

Data Analysis Plan

In this study, I employed an ANCOVA. The research questions and associated hypotheses that follow were answered with the results of a 2x2 factorial ANCOVA on assessment scales that measured various mental health attitudes and opinion, after accounting for first survey scores and age.

Research Questions and Hypotheses

The research questions I addressed in this study and corresponding hypotheses were:

RQ1. Does a didactic seminar change attitudes about mental health among college students in Jamaica, West Indies, after controlling for 1st survey scores and age by using them as covariates?

$H1_a$: The didactic seminar positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H1_0$: The didactic seminar did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

RQ2. Is there a difference between male and female in attitudes towards mental illness among college students in Jamaica, after controlling for 1st survey scores and age by using them as covariates?

$H2_a$: Gender positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H2_0$: Gender did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

The following hypotheses addressed interaction between the independent variables:

$H3_a$: There is a significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H3_0$: There is no significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

The independent and dependent variables are described in Table 1.

Table 1

Study Variables

Variable	How Measured	Type
Help seeking attitude (2nd survey)	2nd survey scores on the HSAS (Fischer & Farina, 1995)	DV
Attitude to mental illness (2nd survey)	2nd survey scores on the AMIQ (Luty et al., 2006)	DV
Opinion about mental illness (2nd survey)	2nd survey scores on the OMI (Cohen & Struening, 1964)	DV
Gender	Item on the demographic questionnaire for socio-demographic variables	IV
Didactic seminar attendance	Yes or no value that indicates whether or not they attended the didactic seminar	IV

Data Analysis

The nonequivalent control group quasi-experimental design employed a first survey variable, second survey variable, and a dummy variable to identify the group to which each participant belonged. In this researcher, I was interested in estimating the difference between the didactic seminar attendees group and nonequivalent control group after adjusting for differences in the first survey. This was the ANCOVA analysis model. However, this model gave a biased estimate of the treatment effect due to first survey measurement error and the nonequivalence nature of the groups (Trochim & Donnelly, 2008). I tested each hypothesis using 2x2 factorial ANCOVA.

I conducted all analyses on SPSS 19.0. Prior to analysis, I examined all data for outliers, skewness, and kurtosis. I removed any outliers prior to analysis; i.e., scores that were far lower or higher than other scores by plotting the data. I examined the assumptions of all statistical tests before analysis (e.g., homoscedasticity, normal distribution). Also, I ran descriptive statistics on the questionnaires to give a

demographic overview of the sample in relation to age and gender; measures of central tendency and dispersion (such as mean and standard deviation) to show descriptive statistics for scale responses of the total sample pre- and posttest.

For testing hypotheses 1 to 3, I used 2x2 factorial ANCOVAs with the OMI, AMIQ, and HSAS scales to compare the didactic seminar attendees and the control group's scores. The two ANCOVA factors were didactic seminar and gender, each with two levels. The level for didactic seminar was (yes, no) while the level for gender was (male, female).

Protection of Participants

Before conducting this research, I sought approval from the IRB of Walden University to comply with the university's ethical standards as well as US federal regulations; and approvals from the Medical Officer of Health in St. Elizabeth, Jamaica, West Indies and the principal of the college where the research was conducted. I only solicited adult participants to obviate the need for parental approval for participation. I did not involve deception in this study and participants were notified that they were free to withdraw from participation at any time, without needing a reason.

I gathered identifying information before the first survey to allow first survey and second survey scores to be paired appropriately. The identifying information included a list containing each participant's name and e-mail address, assigned code, first survey packet number, and second survey packet number (see Participant List, Appendix K). I did not expected that participation in the didactic seminar or completion of the first or second survey assessments would pose any danger beyond what might normally be encountered in the participants' day-to-day life. However, should participants have felt

any distress because of participating in the study or because of considering the implications of mental illness stereotypes and stigma, I made provision for counseling by a mental health professional (see Appendix M for a list of potential therapists).

I obtained information about participants on paper for both first and second survey assessments. I assigned each set of questionnaires in a packet the same number and each packet to a unique number. For security, I kept the list containing participants' information in a locked cabinet with access only to me. Once the second survey was complete, I removed the participants' names and e-mail addresses from the list. I did this to protect the participants' confidential information and I informed them of this process at the time of informed consent discussion (see American Psychological Association, Standard 4.01, Standard 4.02b, Standard 6.02b, 2012).

Ethical Procedures

I conducted this research internationally in the country of Jamaica, West Indies. Therefore, I obtained the "Guidelines for Conducting Research at the Ministry of Education" from Jamaica's Ministry of Education regarding regulation for conducting research on education (see Appendix P). I took all relevant regulations regarding human research in Jamaica into consideration to maintain compliance with the country's regulations.

The Jamaica's Ministry of Education approved the study (see Appendix R) and they sent the college where the research would be conducted the approval on my behalf. The names and addresses of all the investigators and collaborators are listed in Appendix W. I included a short summary of the study in Appendix X and a declaration of conformity with guidelines in Appendix Y. I collected first and second survey data. I

completed the human subject protection online training by Family Health International (FHI), in English. Copy of the certification is contained in Appendix T.

In this research, I did not assume dual roles. A teacher announced the forthcoming research during normal assembly (non-academic time); I asked another teacher to post research flyers on billboards throughout the college; I did informed consent, first and second survey at the participant's convenience; and the college implemented and oversaw the didactic seminar presentation according to its policies and procedures. Students could attend the didactic seminar without participating in the study. The college allowed me to invite students who attended the didactic seminar to complete surveys for the research.

Although I am a Jamaican by birth, I am not originally from the community where the research was conducted. Essentially, my role was to recruit participants, perform analyses, and present the findings.

I conducted written informed consent and its verbal explanation in English, which is the official language of Jamaica. I am a Jamaican who grew up in Jamaica and attended college in Jamaica. I was therefore aware of local norms of privacy, confidentiality, and advocacy. However, in case there were breaches in confidentiality, I would consult with qualified experts (Mensana – a mental health support group in Jamaica, nearby hospital, a clinic, and the Guidance Counselor of the college) to determine appropriate action plans.

I had been in contact with the Ministry of Health in Kingston, Jamaica, West Indies and Mensana – a local mental health advocacy in Jamaica, West Indies, in case help was needed to deal with adverse events. This local mental health advocacy group

had experience in conducting community forums on issues of mental health, influencing Jamaica's mental health policies, and in dealing with the local press. At the end of the research, I made a general description of a college in Jamaica where the research was conducted. For example, "I conducted research at a college in Jamaica, West Indies to determine if a didactic seminar on mental illness is effective in positively changing the attitudes of college students in Jamaica toward mental illness." In this research, I utilized non-academic time (normal assembly) for data collection to minimize disruption of learning time. This research was beneficial to student teachers, enabling them to recognize and address their students' mental health problems, as well as to refer those young people affected by mental health complications to health professionals for treatment. In doing this, these future instructors had an exceptional opportunity to participate in an important imperative in the health and well-being of Jamaican youth. It prepared them with useful implements and awareness required to recognize and intervene aptly in situations where mental illness may be a concern.

For this research, I first collected test data on paper. After collection of the data, I immediately stored them in a locked briefcase until I was able to transfer them to a filing cabinet. I am the only one who could access the briefcase and filing cabinet. Later, I transferred the data to electronic format on a password-protected computer with access only to me. I stored the same data on a password-protected flash drive that was kept in a locked cabinet with access only to me; consent forms separately from this data and from the completed questionnaires; and all three data files in separate secured locations with access only to me.

I entered data from the first and second surveys into SPSS and verified them for accuracy of entry. I used the SPSS statistical program to conduct data analyses. The research design is available for replication and raw data (without participants' identifying information) for reanalysis only by other competent members of the scientific community (see American Psychological Association, Standard 6.01(2), Standard 8.14, and Standard 9.04, 2012). Once the data retention period is over, I will shred all data on paper; electronic data stored on USB and hard drives will be overwritten using Secure Erase (Secure Data Deletion, 2012).

Summary

In Chapter 3, I described the research methodology for the current study. In this research, I sought to enhance and understand the effect of a didactic seminar on attitudes of college students in Jamaica toward mental illness. I used a sample of 184 participants and a 2X2 mixed factorial ANCOVA design to determine the impact of pre- and post-didactic sessions on attitudes about mental illness. In this study, I used participants' first survey scores and age as controls when measuring the effects of a didactic seminar and gender on attitudes toward mental illness. All the measures utilized in this experiment were self-administered and participants were presented with a paper-and-pencil battery comprising all the scales to be completed. I included in the chapter, material pertaining to protection of human subjects and informed consent from participants.

In Chapter 4, I present data analysis, data collection, preliminary analysis, comments on didactic seminar treatment, inferential analysis of each dependent variable, and a summary of findings. In Chapter 5, I discuss the research findings, limitations of the study, and provide the recommendation, implication, and conclusion of the study.

Chapter 4: Data Analysis

Introduction

The purpose of this study was to close the gap regarding the understanding of mental illness of college students in Jamaica, as well as to determine how a didactic seminar affected attitudes towards people with mental disorders in Jamaica, West Indies. The purpose of the study also included determining whether there were gender disparities in the attitudes towards mental illness among college students in Jamaica. I posed two research questions in Chapter 1:

RQ1. Does a didactic seminar change attitudes about mental health among college students in Jamaica, West Indies, after controlling for 1st survey scores and age by using them as covariates?

$H1_a$: The didactic seminar positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H1_0$: The didactic seminar did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

RQ2. Is there a difference between male and female in attitudes towards mental illness among college students in Jamaica, after controlling for 1st survey scores and age by using them as covariates?

$H2_a$: Gender positively affected Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H2_0$: Gender did not positively affect Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

The following hypotheses addressed interaction between the independent variables:

$H3_a$: There is a significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

$H3_0$: There is no significant interaction between didactic seminar and gender on Jamaican college student attitudes toward mental illness, after controlling for 1st survey scores and age as covariates.

In the current chapter, I presented the results from the analyses performed to test the three null hypotheses of this study. Initially, I presented the results from preliminary analyses, including how the data were collected, descriptive statistics for all study variables, and the results from the testing of the assumptions required for the ANCOVA analysis. Then, I presented the results from the inferential analyses performed to test the three null hypotheses, and the chapter ends with a summary.

Data Collection

The research population was a convenience sample drawn from a college in Jamaica, West Indies. Two hundred college students volunteered and participated in the first survey. Prior to the first survey, I explained to the participants that participating in the study was voluntary and that their names or the college would not be mentioned in the study. In addition, I gave information about the study, explained the risk of participating in the study; and told participants that they could withdraw at any time, that they must be 18 years or older, and that they must be registered at the college to participate. Each participant had to sign the informed consent to participate in the study.

I collected data for the first survey over a period of two days on the campus of the college in a private office. There were 200 student participants. After the first survey was completed, the college presented the didactic seminar and was open to all students at the college who found the time to attend. Some students were absent from the college at the time of the didactic seminar due to required teaching internships off campus. The second survey was completed four weeks after the didactic seminar was given. Again, I collected data over a period of two days on the campus of the college, in a private office. I asked participants at the completion of the second survey to check "yes" or "no" if they attended the didactic seminar given by the college. Only 184 of the 200 participants returned for the second survey. I conducted all analyses using SPSS.

Preliminary Analyses

Descriptive Statistics

A total of 184 individuals participated in this study. Only 16 of the 200 participants did not return for the second survey. Thus, these participants were not considered in the study. I determined that about 8% of the participants that participated in the first survey did not return for the second survey. Tables 2 and 3 contain descriptive statistics for the group, gender, and age of the participants in this study. The majority of the participants (64.1%) attended the didactic seminar. Most of the participants (85.9%) were female, and the average age was 22.75 years old (SD = 5.00 years).

Table 2

Descriptive Statistics for Sample Demographic and Group Characteristics

Variable	*N*	%
Group		
Didn't attend the seminar	66	35.9
Attended the seminar	118	64.1
Gender		
Male	26	14.1
Female	158	85.9

For all three dependent variables, I generated histograms to determine whether there were outliers. For the purpose of this study, outliers were defined as data points outside the normal range. Points outside the normal range are observed based on the normal curve in the histogram. These are data points that lie outside the bell curve. Based on the histograms in Appendix T (Figures 2 to 7), I determined that there are no outliers for the dependent variables scores are within normal range and there were no observed data points lying outside the norm. I presented the means, standard deviations, and range of values for the dependent variables in Table 3. Higher scores for the dependent variables are indicative of more positive attitudes. I examined histograms for each of the three dependent variables (see Appendix T) at the first survey and second survey and showed approximate.

I presented descriptive statistics for the dependent variables in Table 3. Scores on the AMIQ ranged from -10 to 4 with a mean of -3.35 (*SD* = 3.28) at the first survey and from -10 to 8 with a mean of -1.93 (*SD* = 4.02) at the second survey. In the normative sample, the mean AMIQ score was -1.86 (Luty et al., 2006), indicating that the current sample had more negative views of mental illness at the first survey, but scores comparable to the normative sample at the second survey. For the OMI, scores ranged

from 114 to 262 with a mean of 198.02 (*SD* = 25.70) at the first survey and from 121 to 283 with a mean of 207.01 (*SD* = 33.04) at the second survey. There were no normative data for the OMI. For the HSAS, scores ranged from 3 to 30 with a mean of 19.38 (*SD* = 5.09) at the first survey and from 1 to 30 with a mean of 20.18 (*SD* = 5.15) at the second survey. In the normative sample, scores on the HSAS averaged 17.45 (Fischer & Farina, 1995), indicating that the scores in the current sample were somewhat higher than the normative sample at both the first survey and the second survey.

Table 3

Descriptive Statistics of Dependent Variables

Variable	*M*	*SD*	Min.	Max
AMIQ first survey	-3.35	3.28	-10	4
AMIQ second survey	-1.93	4.02	-10	8
OMI first survey	198.02	25.7	114	262
OMI second survey	207.01	33.04	121	283
HSAS first survey	19.38	5.09	3	30
HSAS second survey	20.18	5.15	1	30

I presented descriptive statistics for the three dependent variables done separately for each group in Table 4. I examined these scores in more detail in the inferential section of this chapter, but two trends are visible. First, for the OMI, the difference between the first and second survey scores was more substantial for those who attend the seminar than for those who did not attend the seminar. Second, for the AMIQ and HSAS, there was little change between the first and second survey scores for the two groups.

Table 4

Descriptive Statistics for Dependent Variables as a Function of Group

	Did not Attend (n = 66)		Did Attend (n = 118)		95% CI of the Difference	
Variable	*M*	*SD*	*M*	*SD*	Lower	Upper
AMIQ first survey	-3.24	3.51	-3.42	3.16	-0.82	1.17
AMIQ second survey	-2.20	3.46	-1.79	4.31	-1.63	0.81
OMI first survey	204.29	21.33	194.52	27.31	2.09	17.45
OMI second survey	198.35	23.33	211.85	36.59	-22.23	-4.76
HSAS first survey	19.09	5.49	19.53	4.86	-1.99	1.10
HSAS second survey	18.41	5.44	21.17	4.72	-4.27	-1.25

Assumption Checking

To determine whether age would be used as a covariate, it was important to determine whether age was related to the dependent variables. I computed Pearson correlations between age and scores on the three dependent variables at the first survey. These correlations were not statistically significant for AMIQ first survey scores, r = -.07, OMI first survey scores, r = .10, or HSAS first survey scores, r = .12. To determine whether male and female participants differed in terms of their scores on the three dependent variables at the first survey, I performed three independent sample *t*-tests. The tests were not statistically significant for the difference between males' and females' AMIQ first survey scores, $t_{(182)}$ = 1.96, OMI first survey scores, $t_{(182)}$ = .78, or HSAS first survey scores, $t_{(182)}$ = -1.32. Based on the analyses of age and gender in relation to the three first survey dependent variable scores, I concluded that age and gender were not significantly related to the dependent variables at baseline. However, some of the *p* values for these correlations and *t*-tests were close to the .05 level of statistical significance (indicating a trend toward significance for the HSAS and age and for the

AMIQ and gender), and therefore I included both age (as a covariate) and gender (as an independent variable) in the ANCOVA analyses.

The ANCOVA analyses require the assumptions of normality for the distributions of the dependent variables and homoscedasticity. I examined histograms for second survey scores and showed approximate normality (see Figures 2 through 7 in Appendix T). I also computed the skew statistic and kurtosis values. For AMIQ second survey scores, the skew statistic was .18, whereas the kurtosis was -.58. For OMI second survey scores, the skew statistic was .51, whereas the kurtosis was .10. For the HSAS second survey scores, the skew statistic was -.60, whereas the kurtosis was .07. None of these values exceeded 1.00 in absolute value, indicating approximate normality for the dependent variables in this study.

I examined homoscedasticity using Levene's (1960) test of the equality of variances. These tests were not statistically significant for the AMIQ test, $F_{(3, 180)} = 1.60$, or the HSAS, $F_{(3, 180)} = .58$. However, Levene's (1960) test was statistically significant for the analysis of OMI scores, $F_{(3, 180)} = 6.95$, $p < .001$, indicating that the assumption of homoscedasticity was not met. Therefore, I used ANCOVA for AMIQ and HSAS scores, whereas I used a generalized linear model to analyze the OMI scores.

Inferential Analyses

In this section, I presented the results from the three ANCOVAs performed to answer the two research questions and test the three null hypotheses of this study. In this section, I presented the results from each of the three ANCOVA. In the summary of findings section at the end of the chapter, I interpreted the results in light of the research questions and hypotheses of this study.

Analysis of AMIQ Scores

Table 5 shows the results from the ANCOVA with AMIQ second survey scores as the dependent variable. The independent variables were gender and group (attended or did not attend didactic seminar) and the covariates were AMIQ first survey scores and age. The only statistically significant effect was for the covariate of AMIQ first survey scores, $F_{(1, 178)} = 6.63$, $p = .01$, Partial eta squared = .036. This effect indicated that AMIQ first survey scores were associated with AMIQ second survey scores. The effects for the covariate of age, $F_{(1, 178)} = .23$; $p = .663$, Partial eta squared= .001, the main effect of gender, $F_{(1, 178)} = .77$; $p = .382$, Partial eta squared = .004, the main effect of group, $F_{(1, 178)} = 2.37$; $p = .126$, Partial eta squared = .013, and the gender by group interaction, $F_{(1, 178)} = 2.34$; $p = .382$, Partial eta squared = .013, were not statistically significant. Based on this analysis, there was no statistically significant difference between AMIQ second survey scores between those who did not attend the seminar versus those who attended when controlling for age, gender, and first survey scores.

Table 5

Results from ANCOVA with AMIQ second Survey Scores as the Dependent Variable (N = 184)

Source of Variance	Sum of Squares	*Df*	Mean Squares	*F*	*P*	Partial eta squared
Covariate: AMIQ first survey scores	104.70	1	104.70	6.63	.011	.036
Covariate: Age	3.62	1	3.62	.23	.633	.001
Gender	12.14	1	12.14	.77	.382	.004
Group	37.38	1	37.38	2.37	.126	.013
Gender * Group	36.89	1	36.89	2.34	.128	.013
Error	2809.63	178	15.78			

Analysis of OMI Scores

The results from the generalized linear model with OMI second survey scores as the dependent variable are shown in Table 6. The generalized linear model is used to analyze the effect of independent variables on the dependent variable without following normality and homogeneity assumptions of parametric tests such as ANCOVA. In that, the OMI scores do not have equal variances, a generalized linear model is more appropriate to analyze relationships between variables as opposed to an ANCOVA. As expected, the effect of the OMI first survey scores was statistically significant, $X^2_{(1, 178)} = 42.015$, $p < .001$, indicating that OMI first survey scores were associated with OMI second survey scores. The effects for age, $X^2_{(1, 178)} = .066$, $p = .797$, and gender, $X^2_{(1, 178)} = 3.066$; $p = .080$, were not statistically significant. However, the effect of group (those who did not attend the seminar versus those who attended the seminar) was statistically significant, $X^2_{(1, 178)} = 14.31$, $p < .01$.

Table 6

Results from the Generalized Linear Model with OMI second Survey Scores as the Dependent Variable (N = 184)

Parameter	B	Std. Error	95% Wald CI		Wald X^2	df	Sig.
			Lower	Upper			
(Intercept)	91.398	19.6479	52.888	129.907	21.639	1	0.000
OMI First Survey	0.55	0.0848	0.384	0.716	42.015	1	0.000
Age	0.111	0.4321	-0.736	0.958	0.066	1	0.797
Gender	11.211	6.4026	-1.338	23.76	3.066	1	0.080
[Group=N] * gender	-18.587	4.9136	-28.218	-8.957	14.31	1	0.000
[Group=Y] * gender	0						
(Scale)	845.863	88.1874	689.535	1037.634			

Analysis of HSAS Scores

Table 7 contains the results from the ANCOVA with HSAS second survey scores as the dependent variable. The HSAS first survey scores were statistically significant in this model, $F_{(1, 178)} = 13.12$, $p < .001$, Partial eta squared = .069, indicating that first survey and second survey scores on the HSAS were associated, as expected. The effects for age, $F_{(1, 178)} = .07$; $p = .789$, Partial eta squared < .001, and gender, $F_{(1, 178)} = 1.05$; $p = .308$, Partial eta squared = .006, were not statistically significant. However, the effect of group was statistically significant, $F_{(1, 178)} = 9.25$, $p = .003$, Partial eta squared = .049. The estimated marginal means for the two groups (controlling for age, gender, and first survey HSAS scores) indicated that those who had attended the didactic seminar had higher second survey HSAS scores (estimated marginal mean = 21.04, $SE = .69$) than those who had not attended the didactic seminar (estimated marginal mean = 17.88, $SE = .78$; $F_{(1,178)} = 9.25$, $p = .003$). This indicated that when controlling for age, gender, and first survey scores, those who had attended the didactic seminar tended to have more positive views about seeking mental health help than those who had not attended the didactic seminar. The interaction between gender and group was not statistically significant, $F_{(1, 178)} = .62$; $p = .431$, indicating that the difference between those who did and did not receive the didactic seminar was the same for male and female participants.

Table 7

Results from ANCOVA with HSAS second Survey Scores as the Dependent Variable (N = 184)

Source of Variance	Sum of Squares	*df*	Mean Squares	*F*	*P*	Partial eta squared
HSAS first survey scores	306.58	1	306.58	13.12	< .001	.069
Age	1.68	1	1.68	.07	.789	.000
Gender	24.48	1	24.48	1.05	.308	.006
Group (Did or did not attend seminar)	216.17	1	216.17	9.25	.003	.049
Gender * Group (Did or did not attend seminar)	14.56	1	14.56	.62	.431	.003
Error	4160.81	178	23.38			

Summary of Findings

This chapter contains the results from the preliminary analyses and the ANCOVAs and generalized linear model analysis performed to determine the effect of the didactic seminar on attitudes about mental health among college students in Jamaica. The analyses provided answers to the research questions on: (a) Will a didactic seminar change attitudes about mental health among college students in Jamaica, West Indies, after controlling for first survey scores and age by using them as covariates, and (b) is there a significant difference between male and female in attitudes towards mental illness among college students?

Analyses of the AMIQ indicated that there was no statistically significant difference between the attitudes toward mental illness as measured through the AMIQ second survey scores between those who did not attend the seminar and those who did attend the seminar when controlling for age, gender, and first survey AMIQ scores. The analysis for second survey OMI scores (controlling for age, gender, and first survey OMI scores) indicated that those who received the didactic seminar had more positive views of

mental illness than those who did not receive the didactic seminar. There was no interaction between gender and group, indicating that the difference between those who did not attend the didactic seminar and those who did attend the didactic seminar was the same for males and females.

The estimated marginal means for the two groups (controlling for age, gender, and first survey HSAS scores) indicated that those who had received the didactic seminar had higher second survey HSAS scores than those who had not received the didactic seminar. This indicated that when controlling for age, gender, and first survey scores, those who had received the didactic seminar tended to have more positive views about seeking mental health help than those who had not received the didactic seminar. The interaction between gender and group was not statistically significant, indicating that the difference between those who did and did not receive the didactic seminar was the same for male and female participants.

For all three dependent variables in this study, the interactions between gender and taking the didactic seminar were not statistically significant. This indicated that the lack of a difference in AMIQ scores and the statistically significant differences for OMI and HSAS scores did not depend on the gender of the participants. In the next chapter, I discussed these results in the context of past research and I offered recommendations for mental health education and future research in this area.

Chapter 5: Discussion

Introduction

Public stigma, negative thoughts, and discrimination have pernicious effects on the lives of people and individuals with serious mental illnesses. I focused this study on determining whether a didactic seminar on mental health issues could change the attitudes of students towards mental illness. I discussed the results of this study in this chapter. There have been campaigns to alleviate the condition and eliminate discrimination among individuals with mental illness. I considered three questionnaires to measure the perceptions on mental illness. These measures included the OMI, HSAS, and AMIQ scores. I focused the OMI and the HSAS scores on measuring the perceptions on mental illness, whereas I focused the AMIQ score on measuring how the participants reacted given a situation with mentally ill patients. Based on the analyses in this study, participants who received the didactic seminar had more positive views about mental health than those who did not receive the didactic seminar, as evidenced using the OMI and the HSAS measures. However, I found no significant difference in AMIQ scores between those who attended the didactic seminar and those who did not attend the didactic seminar.

There are four sections in this chapter. The first section presents an interpretation of the results in the context of past research in this area, as well as the conclusions in the context of the theoretical framework for this study. The second section is a discussion of the limitations of the study. In the third section, I provided recommendations for future research in this area. Finally, I presented the conclusions and implications of the findings from this study.

Despite more favorable attitudes toward mental illness in Jamaica than in other countries, the stigma of mental illness remains. This stigma is exacerbated by cultural attitudes and an internalization of stigma by mentally ill people (Health Service Executive, 2012; National Suicide Research Foundation, 2012). Therefore, I focused this study on closing the gap in literature, which lacks studies regarding the attitudes and beliefs of mental illness and the mentally ill among college students in Jamaica, through analyzing whether a didactic seminar would be effective in changing the perspectives on mental illness. The teachers' college in Jamaica, West Indies where I did the research, conducted a didactic seminar, aimed at educating and informing participants regarding mental illness.

I conducted this study to determine whether there were gender differences in attitudes towards mental illness among college students in Jamaica. I investigated gender disparities to determine whether gender played a role in attitudes toward mental health. In analyzing whether gender was related to differences in attitude towards mental health, programs focused on improving perceptions towards mental illness could be directed towards a particular gender group. The results also showed that the didactic seminar had a positive effect on the attitudes toward mental illness and help-seeking behavior, and that these effects were the same for male and female participants. However, positive benefits were only found on two of the three dependent variables (the OMI and HSAS, but not the AIMQ).

Interpretation of the Findings

In this study, I used a convenience sample of 184 students attending a college in Jamaica.. The students at this college are from all sections of Jamaica. The college

presented the didactic seminar and it was open to all students at the college who found time to attend. I asked students who chose and chose not to participate (nonequivalent control group) in the didactic seminar to take a second survey.

This study is important because in general, not only is there a high prevalence of mental illnesses in Jamaica, there is also a stigma attached to having a mental illness. Mental illnesses contribute to disability, death, and health care costs (Knapp, 2003; WHO, 2003) and the stigma of having a mental illness or receiving treatment for a mental illness adversely affects the daily lives of these individuals (National Disability Authority, 2012). The stigma attached to having a mental illness can also decrease the likelihood of an individual seeking treatment (Health Service Executive, 2012; National Suicide Research Foundation, 2012). Seminars such as the one evaluated in this study can be used to improve attitudes towards people with mental illness. The results of the changed attitudes can be better care for the patients.

Based on the results of the analyses I presented in Chapter 4, I drew the following conclusions:

1. Although not statistically significant, those who attended the seminar had more positive attitude scores towards mental illness after the seminar than those who did not attend.
2. Those who attended the didactic seminar had more positive views about mental illness than those who did not, based on the OMI and the HSAS scores. However, there was no change in AMIQ scores of the study, despite the appropriate use of the scales.

3. There were no gender differences in the attitudes of mental illness after the seminar.

The results from the current study are consistent with the results from past studies conducted in Jamaica (Arthur et al., 2010; Gibson et al., 2008; Hickling et al., 2011; Francis, 2007), in that I observed positive effects of educational programs on attitudes toward mental illness. However, this study was the first to focus on a specific didactic seminar in terms of its effects on attitudes toward mental illness. The use of the didactic seminar allowed the participants to visualize the benefits of changing their attitudes toward mental illness. On the other hand, other programs are focused on the existence of mental illness and the implications to the patients.

According to Pescosolido et al. (2010), changing negative attitudes toward mental illness is difficult, and attitudes have not changed substantially in recent years. This is somewhat inconsistent with the results from the current study, which indicated that it might be possible to change negative attitudes toward mental illness through interventions such as the didactic seminar used in this study. Pescosolido et al. had examined changes in attitudes towards mental illness over time. However, they did not consider a specific intervention. Attitudes may not change by themselves over time.

It can be very difficult to change attitudes because individuals are resistant to change (Prochaska, 2013). The levels of change for attitudes vary based on the stage of change that occurs with a person. A change in attitude requires a deeper level of change than perceptions, in that people must be convinced that change in their behavior would only occur if they willingly changed their attitude in regards to how they think. Thus, actions must be taken to implement the change and prevent resistance. Although

Pescosolido et al. (2010) did not evaluate the effectiveness of a specific intervention such as a didactic seminar and other conferences designed to change the attitudes of different individuals, the generally negative conclusion they offered is inconsistent with the results from the current study, in which I observed positive changes.

Based on the findings of this study, there are factors that can influence people to change their attitudes. Attitudes towards mental illness have remained the same over time, despite the general trend in changes of the attitudes of individuals towards other phenomena such as physical and emotional conditions (Carter et al., 2010). Most people in society had negative perceptions towards the families, relatives, and persons with mental conditions. These negative perceptions included the idea that people with mental illness are incompetent, unpredictable, and dangerousness, resulting in their resistance to seeking medications and psychological help (Angermeyer & Matschinger, 2005; Carter et al., 2010; Corrigan & Watson, 2002; Jorm & Griffiths, 2008; Mann & Himelein, 2004). For instance, the 1999 Surgeon General's Report on Mental Health acknowledged stigma as one of humanity's leading hindrances to enhanced mental health care and stigma contributing to decreased self-respect of people and hinderance to involvement in society.

Conversely, Granello and Granello (2000) suggested that educational programs and campaigns have the potential to provide accurate information on all aspects of mental illness, and thus reduce stigmatization. This is consistent with the results from this study (and with cognitive consistency theory as described later in this section). The educational program I examined in the current study (the didactic seminar) appeared to have positively affected attitudes toward those with mental illnesses, just as Granello and Granello predicted.

Hickling et al. (2011) indicated that in Jamaica, prior efforts have been made to educate people regarding mental illness to reduce the stigma associated with mental illness and help-seeking behaviors. They also pointed out that a main factor of mental illness stigma in Jamaica was the dehumanization of those with mental illness who lived on the streets. The stigma causes negative impacts not just to the individuals who have mental illness, but also to their families. Hickling et al. further indicated that there is a widespread prejudgment that the mentally ill are unpredictable and dangerous. The perception of danger associated with mental illness increases as the stigma against individuals with mental illness increases. People with mental illness have been viewed as having a negative impact on society and as being incapable of benefiting society. However, community mental health care services are now in place and these appear to be transforming some of the negative stigma associated with mental disorders and treatment.

In general, the stigma towards health seeking is attributed to the fact that those who seek help for psychological conditions are already prejudged by society to engage in certain behaviors that can be detrimental to the society and to other people (Hickling et al., 2011). While health programs conducted in Jamaica have been effective in raising people's awareness of mental illnesses, the effects have been small (Arthur et al., 2010; Gibson et al., 2008; Hickling et al., 2011; Francis, 2007). The didactic seminar considered in this study included educating and providing information on mental illnesses, its symptoms, and ways in which individuals could help and support people with mental illnesses. Although existing health programs have tried to increase awareness of mental illness, these programs did not provide detailed discussions on experiences with mentally ill individuals and ways in which these people could be

supported. The didactic seminar focused on sharing experiences through two-way communication to learn from these experiences, raise individuals' awareness of how people with mental illness should be treated, and how they could be supported.

Whereas changes to attitudes may occur over time, there have been no studies conducted to evaluate interventions that could result in positive changes in attitudes toward mental illness, specifically in Jamaica. Because mental illnesses have been prevalent in Jamaica, it is important to consider whether attitudes of Jamaicans on mental illness could positively change. As previous studies have focused on whether attitudes change naturally over time, the current study represented an extension of past research because a specific and targeted intervention was examined (Arthur et al., 2010; Hickling et al., 2011).

The conceptual framework for this study was based on the theories of cognitive consistency and cognitive heuristics (Rydell et al., 2007; Simon et al., 2004; Wood, 2000). These theories explain how people process, deal with, and react to information. According to cognitive consistency theory, an individual's attitude toward mental health could be inconsistent with information on mental health. These cognitive theories were chosen, as they contribute to the understanding that attitudes can change over time and as a result of an intervention such as the didactic seminar. According to Cvencek, Meltzoff, and Kapur (2014), these theories focus on how people process, deal with, and react to information or stimuli; cognitive consistency may be culturally universal and a key mechanism for developmental change in social cognition; both cultural universals and cultural variations matter in developing social cognition. According to cognitive consistency theory, the inconsistency between the attitude and the factual state of health

can be attributed to the importance of the social and the cultural aspects of cognitive development. Social and cultural backgrounds of individuals affect their attitudes toward mental illness. This suggests that it is important to consider the change in attitudes towards mental illness, considering the specific social cultural background of Jamaicans. Therefore, my goal of this study was to determine whether a person's attitude could be brought into consistency with factual information.

According to the results from this study, this approach was effective. For two of the three dependent variables in this study (attitudes toward mental illness and attitudes towards help seeking), the participants who attended the didactic seminar had more positive attitudes after the seminar than those who did not attend. The OMI and HSAS measures indicated significant difference in the attitude towards mental illness between those who attended the seminar and those who did not. However, there were no significant differences in AMIQ scores. The insignificant difference may be because of the nature of the items in the three questionnaires. The OMI and the HSAS are more focused on the perceptions on mental illness, whereas the AMIQ is focused on how a person will react given a situation with people with mental illness. This implies that the respondents may have changed their perceptions, but they have yet to apply this on how they treat mentally ill people. A more positive view may be present in respondents who have participated in the didactic seminar. However, the didactic seminar did not affect the way in which the respondents reacted to people with mental illnesses. These results are consistent with cognitive consistency theory. As the participants rejected contradictory evidence (what they learned in the seminar versus their own opinion or

what they had learned from others) or altered how evidence was evaluated, their attitudes were changed (Simon et al., 2004).

The didactic seminar allowed participants to understand the benefits and the importance of seeking medications and professional help for mental illness. Seminar participants were able to learn about the nature as well as the difficulties of having mental illness. However, the way they act with mentally ill people has not changed. Therefore, this implies that continuous efforts are necessary to change the behavior of people towards mentally ill people. The overall effect size was determined to be small, less than .05, which indicates that firm generalization of conclusions cannot be achieved. The small effect size could be attributed to the unequal number of participants for those who attended and did not attend the seminar, or it could be attributed to the small effect of the intervention considered in this study.

Limitations of the Study

The limitations of the study included the factors inherent to the type of study and the variables available to the researcher. In this study I did not attempt to understand population-level attitudes towards mental health in Jamaica. I recruited the participants in this study from students at a particular college, who may have different opinions and attitudes from those of the general population. However, the participants were future teachers able to initiate change through their students, which may have an impact in terms of the direction of change within this field. Furthermore, generalizability to other Caribbean nations may be limited given the specific population studied in this study. This was not a true experimental study, as the participants were free to choose whether to attend the seminar. This resulted in the use of a quasi-experimental research design in

which the participants selected the group in which they would be. This had the potential to bias the results, as individuals with more positive attitudes toward mental illness could have chosen to participate in the seminars, whereas while those with more negative attitudes could have chosen not to participate (and consequently place themselves into the control group). However, there were no differences between the groups on the measures before the presentation of the seminar. Thus, even though a limitation of this study was that a true experimental study was not performed, it is likely that the obtained results from this study are valid because pre-existing group differences were controlled through the selection of the appropriate statistical tests and control variables.

Another limitation of this study was that the results might not generalize beyond the type of individuals who participated in this study. The samples were limited to students at one particular college in Jamaica who completed both the first and the second surveys. Moreover, participants were not equally distributed in the two groups considered in this study. Gender as well as age differences were not very diverse in the sample, which may have affected the results of the study. This might be an explanation for why no gender differences were observed. Dell'Osso, Carmassi, and Massimetti (2011) found that there were gender differences in the attitudes to mass trauma considering PTSD. They also found gender differences in attitudes about PTSD after trauma; it is possible that there are gender differences in attitudes towards mental illness in general. However, the authors had inconclusive findings regarding the significance of gender on the attitudes towards mental illness. Future researchers could address the generalizability of the findings from this study by exploring the effectiveness of didactic seminars designed to change attitudes toward mental illness in other countries and among

individuals with different demographic characteristics, including age and personal experience with the mentally ill.

In total, 184 individuals participated in this study. Sixteen of the 200 initial participants did not return for the second survey. Thus, these participants were not considered in the study. Sixty-two percent (n = 10) of the 16 participants who did not complete the second survey attended the didactic seminar during the first survey. Thus, more participants who attended the seminar completed the second survey as opposed to participants who did not attend the seminar. A limitation is that more students participated in the didactic seminar, which resulted in an unequal number of participants in each group (attended seminar and did not attend seminar).

Another limitation is that the participants were not followed for a longer period. Responses of participants may change over time (Cozby, 2009). For example, responding to the survey a week after the didactic seminar could provide different responses as opposed to completing the survey immediately after the didactic seminar. Moreover, responses of participants a month or a year after the seminar could also be different.

Recommendations

Based on results and limitations of this study, I developed several recommendations for future research. First, I noted above that a true experiment was not conducted in this study because the participants selected their own group by either participating in the didactic seminar or not participating in the didactic seminar (resulting in the use of a quasi-experimental research design). Thus, firm causal conclusions cannot be drawn from this study. Despite controlling for pre-existing group differences such as gender and age, the participants were not randomly assigned to identify causal

relationships between variables of attending the didactic seminar and the attitudes toward mental illness. Therefore, it is possible that the didactic seminar itself was not responsible for the observed results. Future researchers should examine the effectiveness of didactic seminars such as the one examined in this study in situations in which true experiments could be performed. However, considering the difficulty of random sampling and random assignment in a true experiment, a stronger quasi-experimental model can also be used. Students should be encouraged to attend the didactic seminar through including such seminars in the curriculum.

Different kinds of seminars should also be compared because seminars other than didactic seminars might have strikingly different results. Thus, another recommendation for this study is to enhance the didactic seminar or to examine other types of seminars that could help in positively changing attitudes toward mental illness. The experience of conducting the didactic seminar could provide insights as to how the seminar could be improved for succeeding sessions. The content of the seminar could also be improved through focusing on possible differences in the attitudes of the participants towards mental illness. Participants of the seminar could have been given information on the consequences of negative attitudes toward mental illness and stigma, in that one's attitudes and beliefs about mental illness are shaped by personal knowledge about mental illness and cultural stereotypes about mental illness (Corrigan et al., 2004; Wahl, 2003). For instance, once such attitudes and views are communicated confidently, they can end in compassionate and wide-ranging comportments (e.g., readiness to seek psychological assistance or talking about their mental illness). Conversely, if such attitudes and

opinions are uttered negatively, they may result in averting and refusing to participate in daily activities.

Another limitation of this study was that the sample was relatively homogenous in terms of their ethnicity and age group, consisting of individuals in college in Jamaica. The participants were also not equally represented in terms of gender, which may have affected the results of this study. Therefore, another recommendation for future research is that researchers should explore the generalizability of the results from this study to other geographic areas and with individuals of varying demographic backgrounds. It is also recommended that future researcher focus on following up on the participants over a longer period, as attitudes may change.

Implications for Social Change

According to cognitive consistency theory, a successful effort to change the attitudes of the participants toward mental illness could result in changes in behavior (Crano & Prislin, 2010; Simon et al., 2004). Negative stigma associated with mental illness may change to positive attitudes through understanding the circumstances of individuals suffering from mental illnesses. The change in attitudes may lead to changes in behavior, which could motivate people to help improve the situations of those who suffer from mental illnesses. Although the results of this study did not show significant changes in behavior towards mental illness, the results showed that perceptions towards mental illness have changed. Through educating people regarding mental illness, they develop perceptions that may later lead to a change in behavior. Moreover, the perceptions on mental illness gained from the seminar could be used to educate other people. Given the high prevalence of mental illness, the negative effects of the stigma of

having a mental illness, and the reduced likelihood of seeking help for mental illnesses due to the associated stigma (Health Service Executive, 2012; National Suicide Research Foundation, 2012), those individuals suffering from mental illness as well as their families and friends might benefit from changes in attitudes towards mental illness by others as a result of the didactic seminars, through sharing their own understanding of mental illness. Although not proven significant, the changes in behavior may have been initiated through the seminar conducted. With more knowledge, people have better understanding of mentally ill people.

If didactic seminars such as the one examined in this study are implemented on a broader scale, attitudes towards the mentally ill may positively change. This could reduce the stigma associated with mental illnesses and consequently improve the lives of those who suffer by increasing the likelihood of obtaining the help they need. The families of those who suffer from mental illnesses could also benefit, as a member of the family could receive the help that he or she needs.

Community awareness in Jamaica and other countries can be raised so that individuals with mental illness, as well as their families, can seek out and receive help to change their attitudes. Moreover, the results of the study benefit communities and countries in raising community awareness by having more seminars in the community. Conducting community seminars provide more in-depth understanding of the situations and predicaments of the individuals with mental illness, as well as their families. Community leaders also have a means to help mentally ill individuals through hosting didactic seminars to inform community members on how to support such individuals. However, it should be noted that none of these benefits would materialize unless attitudes

are changed through programs such as the didactic seminar examined in the current study.

Conclusions

The purpose of this study was for me to evaluate a didactic seminar aimed at increasing understanding of mental illness in Jamaica. An additional research question was whether there were gender disparities in the attitudes towards mental illness among college students in Jamaica. The results showed that for two of the three dependent variables (the OMI and HSAS, but not the AMIQ), the didactic seminar had a positive effect on attitudes toward mental illness and help-seeking behavior, and that these effects were the same for male and female participants. The results were insignificant for the AMIQ scores of participants. A reason for this is that the nature of the items in the questionnaire also warrants social and cultural beliefs specific to Jamaicans, rather than only the perceptions on mental illness. The AMIQ scores are focused on the situations instead of directly capturing the perception of people on mental illness.

The insignificant change after the didactic seminar may be due to preconceived ideas on how to react, given the situation, or may be due to habits developed early on and can be changed slowly over time. The difference in measured constructs may have resulted in the insignificant change after the didactic seminar. Because the AMIQ focused on what people would do in a given situation, the perceptions towards mental illness may have changed due to the didactic seminar but not on how they would act when interacting with mentally ill individuals. The didactic seminar seems to have created a positive impact on attitudes towards mental health and health-seeking behavior.

Further, the effects of the didactic seminar resulted in more positive perceptions of individuals with mental illness, their families, and to society in general.

Based on these results and on the limitations and design of this study, I developed two recommendations for future research:

1. Future researchers should examine the effectiveness of didactic seminars, such as the one examined in this study, in situations in which true experiments could be performed.
2. Future researchers should explore the generalizability of the results from this study to other geographic areas and with individuals of varying demographic backgrounds.

Based on the positive results of this study, didactic seminars are effective in improving attitudes towards mental illness when implemented on a broader scale. Different kinds of seminars should also be compared because seminars other than didactic seminars might have strikingly different results.

This research may be the beginning of many efforts to follow by advocate for the changing of attitude toward people with mental illness, utilizing didactic seminars as intervention strategies. Positively changing society's attitudes toward the mentally ill will lead people toward being more caring and sympathetic. I hope that understanding attitudes toward mental illness can help identify and inform primacies that award the efforts of mental health public interventions, benefactors, legislators, educators, and others to diminish stigma. Most of all, it should offer prized awareness of people living with mental illness. I also hope that this data can help form initiatives to actively decrease stigma and eradicate blockades for those pursuing or getting treatment for mental illness.

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Appendix A: Didactic Seminar on Mental Illness

Material Source

This is a customized presentation of "The Science of Mental Illness" teaching module, produced by BSCS for the National Institutes of Health and the National Institute of Mental Health. Permission was granted for this to be used as intervention in a research on attitude towards mental illness.

Objective

The objective of this didactic seminar is to educate participants on major concepts in mental illness such as its center of control, symptoms, causes, risk factors, treatment, consequences of no treatment, and stigma. The seminar also aims to impart coping skills to combat the illness and to facilitate discussions of participants' understanding of mental illness using scenarios of mental illness in the form of vignettes, based on real-life stories of people diagnosed with mental disorders. Learning the facts about mental illness can dispel misconceptions and positively influence the way individuals view mental illness.

Definition of Mental Illness

A mental illness can be defined as a health condition that changes a person's thinking, feelings, or behavior (or all three), and that causes the person distress and difficulty in functioning.

The Brain: Control Central

The brain is the body's organ that controls feelings, behaviors, and thoughts. Changes in the brain's activity result in changes in each of these responses. These changes can be either short-term or long-term.

Not all brain diseases are categorized as mental illnesses. Disorders such as epilepsy, Parkinson's disease, and multiple sclerosis are brain disorders, but they are considered neurological diseases rather than mental illnesses. Interestingly, the lines between mental illnesses and these other brain or neurological disorders is becoming somewhat blurred.

As scientists continue to investigate the brains of people who have mental illnesses, they are learning that mental illness is associated with changes in the brain's structure, chemistry, and function and that mental illness does indeed have a biological basis.

Brain Function

The brain is an immensely complex organ. The basic functional unit of the brain is the neuron. Mental health professionals base their diagnosis and treatment of mental illness on the symptoms that a person exhibits. The goal of these professionals in treating a patient is to relieve the symptoms that are interfering with the person's life so that the person can function well. Research scientists, on the other hand, have a different goal. They want to learn about the chemical or structural changes that occur in the brain when someone has a mental illness. If scientists can determine what happens in the brain, they can use that knowledge to develop better treatments or to find a cure.

Scientists believe that mental illnesses result from problems with the communication system in the brain. They understand that mental illnesses are associated with changes in neurochemicals. For example, in people who have depression, less of the neurotransmitter serotonin is released into the synaptic space than in people who do not have depression. Certain medications called selective serotonin reuptake inhibitors

(SSRIs) relieve symptoms of depression by causing an increase in the amount of serotonin in the synaptic space.

The Causes of Mental Illnesses

At this time, scientists do not have a complete understanding of what causes mental illnesses. The fields of neuroscience, psychiatry, and psychology address different aspects of the relationship between the biology of the brain and individuals' behaviors, thoughts, and feelings in assessing how their actions sometimes get out of control. Through this multidisciplinary research, scientists are trying to find the causes of mental illnesses. Once scientists can determine these causes, they can use that knowledge to develop new treatments or to find cures.

Types of Mental Illness

There are many different mental illnesses, including depression, schizophrenia, attention deficit hyperactivity disorder (ADHD), autism, and obsessive compulsive disorder. Each illness alters a person's thoughts, feelings, and/or behaviors in distinct ways.

Most people have had some exposure to mental illness, but do they really understand it or know what it is? Many of their preconceptions are incorrect. As with many diseases, mental illness is severe in some cases and mild in others. Individuals who have a mental illness do not necessarily appear to be sick, especially if their illness is mild. Other individuals may exhibit more explicit symptoms such as confusion, agitation, or withdrawal. In this seminar, discussion of mental illness will be restricted to those illnesses that are traditionally classified as mental illnesses.

Diagnosing Mental Illness

Mental health professionals

To be diagnosed with a mental illness, a person must be evaluated by a qualified professional who has expertise in mental health. Mental health professionals include psychiatrists, psychologists, psychiatric nurses, social workers, and mental health counselors. Family doctors, internists, and pediatricians are usually qualified to diagnose common mental disorders such as depression, anxiety disorders, and ADHD. In many cases, depending on the individual and his or her symptoms, a mental health professional who is not a psychiatrist will refer the patient to a psychiatrist. A psychiatrist is a medical doctor (M.D.) who has received additional training in the field of mental health and mental illnesses. Psychiatrists evaluate the person's mental condition in coordination with his or her physical condition and can prescribe medication. Only psychiatrists and other M.D.s can prescribe medications to treat mental illness.

When a mental health professional works with a person who might have a mental illness, he or she will, working with the individual, determine what symptoms the individual has, how long the symptoms have persisted, the severity of the symptoms, and how his or her life is being affected. In many cases, the professional will also get information about the patient from family members to obtain a more comprehensive picture. A physician will be likely to conduct a physical exam and consult the patient's history to rule out other health problems. For example, some symptoms (such as emotional swings) can be caused by neurological or hormonal problems associated with chronic illnesses such as heart disease, or they can be a side effect of certain medications. After the individual's overall health is evaluated and the condition diagnosed, the doctor will develop a treatment plan.

Risk Factors for Mental Illnesses

Although scientists at this time do not know the causes of mental illnesses, they have identified factors that put individuals at risk. Some of these factors are environmental, some are genetic, and others are social.

Environmental factors such as head injury, poor nutrition, and exposure to toxins (including lead and tobacco smoke) can increase the likelihood of developing a mental illness. Genes also play a role in determining whether someone develops a mental illness. The illnesses that are most likely to have a genetic component include autism, bipolar disorder, schizophrenia, and ADHD. Mental illnesses are not triggered by a change in a single gene; scientists believe that the interaction of several genes may trigger mental illness.

Social factors also present risks and can harm an individual's, especially a child's, mental health. Social factors include:

- severe parental discord;
- death of a family member or close friend;
- a parent's mental illness;
- a parent's criminality;
- overcrowding;
- economic hardship;
- abuse;
- neglect;
- exposure to violence.

Genetic, environmental, and social factors combine to influence whether someone becomes mentally ill and might determine whether a case of mental illness is mild or severe.

Treating Mental Illnesses

Most mental illnesses can be treated effectively. Treatments may include the use of medications and psychotherapy. At this time, most mental illnesses cannot be cured, but they can usually be treated effectively to minimize the symptoms and allow the individual to function in work, school, or social environments. Treatments begin after an individual who sees a qualified mental health professional is diagnosed with mental illness.

Medications

Medications are often used to treat mental illnesses. To be fully effective, medications for treating mental illness must be taken for a few days or a few weeks. When a patient begins taking medication, it is important for a doctor to monitor the patient's health. If the medication causes undesirable side effects, the doctor may change the dose or switch to a different medication that produces fewer side effects. If the medication does not relieve the symptoms, the doctor may prescribe a different medication. Sometimes, individuals who have a mental illness do not want to take their medications because of the side effects. The psychiatrist or physician can usually adjust the dose or change the medication to alleviate side effects. It is important to remember that all medications have both positive and negative effects. For example, antibiotics have revolutionized treatment for some bacterial diseases. However, antibiotics often affect beneficial bacteria in the human body, leading to side effects such as nausea and diarrhea.

Psychotherapy

Psychotherapy is a method of treatment in which a mental health professional (psychiatrist, psychologist, or other mental health professional) and the patient discuss the patient's problems and feelings. This discussion helps patients understand the basis of their problems and find solutions. Psychotherapy may take different forms. The therapy can help patients:

- change thought or behavior patterns;
- understand how past experiences influence current behaviors;
- solve other problems in specific ways;
- learn illness self-management skills.

Psychotherapy may occur between a therapist and an individual; a therapist and an individual's family members; or a therapist and a group. Often, treatment for mental illness is most successful when psychotherapy is used in combination with medication. For severe mental illnesses, medication relieves the symptoms and psychotherapy helps individuals cope with their illness. Just as there are no medications that can instantly cure mental illnesses, psychotherapy is not a one-time event. The amount of time a person spends in psychotherapy can range from a few visits to a few years, depending on the nature of the illness or problem. In general, the more severe the problem, the more lengthy the psychotherapy will be.

The Consequences of Not Treating Mental Illness

Most people don't think twice before going to a doctor if they have an illness such as bronchitis, asthma, diabetes, or heart disease. However, many people who have a mental illness do not get the treatment that would alleviate their suffering. Studies

estimate that two-thirds of all young people with mental health problems are not receiving the help they need and that less than one-third of the children under age 18 who have a serious mental health problem receive any mental health services. Mental illness in adults also often goes untreated.

In September 2000, the former U.S. Surgeon General, Dr. David Satcher, held a conference on children's mental health. He emphasized the importance of mental health in children, stating that "Children and families are suffering because of missed opportunities for prevention and early identification, fragmented services, and low priorities for resources. Overriding all of this is the issue of stigma, which continues to surround mental illness." The consequences of mental illness in children and adolescents can be substantial.

Many mental health professionals speak of accrued deficits that occur when mental illness in children is not treated. To begin with, mental illness can impair a student's ability to learn. Adolescents whose mental illness is not treated rapidly and aggressively tend to fall further and further behind in school. They are more likely to drop out of school and are less likely to be fully functional members of society when they reach adulthood. They also now know that depressive disorders in young people confer a higher risk for illness and interpersonal and psychosocial difficulties that persist after the depressive episode is over. Furthermore, many adults who suffer from mental disorders have problems that originated in childhood.

Treatment, including psychotherapy and medication management, is cost-effective for patients, their families, and society. The benefits include fewer visits to doctors' offices, diagnostic laboratories, and hospitals for physical ailments that are

grounded in psychological distress; reduced need for psychiatric hospitalization; fewer sick days and disability claims; and increased job stability.

The Stigma of Mental Illness

Stigmas are negative stereotypes about groups of people. “Mentally ill people are nuts, crazy, wacko.” “Mentally ill people are morally bad.” “Mentally ill people are dangerous and should be locked in an asylum forever.” “Mentally ill people need somebody to take care of them.” How often have individuals heard comments like these or seen these types of portrayals in movies, television shows, or books? They may even be guilty of making such comments ourselves. Is there any truth behind these portrayals, or are these negative views based on our ignorance and fear?

Common stigmas about people who are mentally ill are that:

- individuals who have a mental illness are dangerous;
- individuals who have a mental illness are irresponsible and cannot make life decisions for themselves;
- people who have a mental illness are childlike and must be taken care of by parents or guardians;
- people who have a mental illness should just get over it.

Words can hurt. Many derogatory words and phrases are used in relation to mental illness. However, these words maintain the stereotyped image and not the reality about mental illness. Try not to use these words. It is more appropriate to refer to “a person who has a mental illness” when speaking about someone suffering from mental disorders.

Each of the foregoing preconceptions about people who have a mental illness is based on false information. Very few people who have a mental illness are dangerous to society. Most can hold jobs, attend school, and live independently. A person who has a mental illness cannot simply decide to get over it any more than someone who has a different chronic disease such as diabetes, asthma, or heart disease can. A mental illness, like those other diseases, is caused by a physical problem in the body. Stigmatization of individuals who have a mental illness leads to injustices, including discriminatory decisions regarding housing, employment, and education.

Overcoming the stigmas commonly associated with mental illness is yet one more challenge that people who have a mental illness must face. Indeed, many people who successfully manage their mental illness report that the stigma they face is in many ways more disabling than the illness itself. The stigmatizing attitudes toward mental illness held by both the public and those who have a mental illness lead to feelings of shame and guilt, loss of self-esteem, social dependence, and a sense of isolation and hopelessness.

One of the worst consequences of stigma is that people who are struggling with a mental illness may be reluctant to seek treatment that, in most cases, would significantly relieve their symptoms. Providing accurate information is one way to reduce stigmas about mental illness. Advocacy groups' protest against stereotypes imposed upon those who are mentally ill. They demand that the media stop presenting inaccurate views of mental illness and that the public stop believing these negative views. A powerful counter to stereotypes about mental illness occurs when members of the public meet people who are effectively managing a serious mental illness: holding jobs, providing for themselves, and living as good neighbors in a community. Interaction with people who have mental

illnesses challenges a person's assumptions and changes a person's attitudes about mental illness.

Providing accurate information is one way to reduce stigmas about mental illness. Attitudes about mental illness are changing, although there is a long way to go before people accept that mental illness is a disease with a biological basis.

Information about Specific Mental Illnesses

Depression

Depression, or depressive disorder, is a leading cause of disability in the United States as well as the rest of the world. It affects an estimated 9.5% of American adults in a given year. Nearly twice as many women as men have depression. Epidemiological studies have reported that up to 2.5% of children and 8.3% of adolescents in the United States suffer from depression.

The symptoms of depression. Depression is more than just being in a bad mood or feeling sad. Everyone experiences these feelings on occasion, but that does not constitute depression. Depression is actually not a single disease; there are three main types of depressive disorders. They are:

- Major depressive disorder;
- Dysthymia;
- Bipolar disorder (manic-depression).

While some of the symptoms of depression are common during a passing "blue mood," major depressive disorder is diagnosed when a person has five or more of the symptoms nearly every day during a two-week period. Symptoms of depression include:

- a sad mood;

- loss of interest in activities that one used to enjoy;
- change in appetite or weight;
- oversleeping or difficulty sleeping;
- physical slowing or agitation;
- energy loss;
- feelings of worthlessness or inappropriate guilt;
- difficulty concentrating;
- recurrent thoughts of death or suicide.

When people have depression, their lives are affected severely: they have trouble performing at work or school, and they lack interest in normal family and social activities. In adults, an untreated major depressive episode lasts an average of nine months. At least half of the people who experience an episode of major depression will have another episode of depression at some point.

Major depressive disorder. In children, depression lasts an average of seven to nine months, with symptoms similar to those in adults. Children and adolescents with depression are more likely than adults to have anxiety symptoms and general aches and pains, stomachaches, and headaches. The majority of children and adolescents who have a major depressive disorder also have another mental illness such as an anxiety disorder, disruptive or antisocial behavior, or a substance-abuse disorder. Children and adolescents who suffer from depression are more likely to commit suicide than other youths. As in adults, episodes of depression are likely to recur.

Dysthymia. Dysthymia is less severe than major depressive disorder, but it is more chronic. In dysthymia, a depressed mood along with at least two other symptoms of

depression persists for at least two years in adults, or one year in children or adolescents. These symptoms may not be as disabling, but they do keep affected people from functioning well or feeling good. Dysthymia often begins in childhood, adolescence, or early adulthood. On average, untreated dysthymia lasts four years in children and adolescents.

Bipolar disorder. A third type of depressive disorder is bipolar disorder, also called manic-depression. A person who has bipolar disorder alternates between episodes of major depression and mania (periods of abnormally and persistently elevated mood or irritability). During manic periods, the person will also have three or more of the following symptoms:

- overly inflated self-esteem;
- decreased need for sleep;
- increased talkativeness;
- racing thoughts;
- distractibility;
- increased goal-directed activity or physical agitation;
- excessive involvement in pleasurable activities that have a high potential for painful consequences.

While in a manic phase, adolescents may engage in risky or reckless behaviors such as fast driving and unsafe sex. Bipolar disorder frequently begins during adolescence or young adulthood. Adults with bipolar disorder often have clearly defined episodes of mania and depression, with periods of mania every two to four years. Children and adolescents with bipolar disorder, however, may cycle rapidly between

depression and mania many times within a day. Bipolar disorder in youths may be difficult to distinguish from other mental illnesses because the symptoms often overlap with those of other mental illnesses such as ADHD, conduct disorder, or oppositional defiant disorder.

Coping with depression. People who have depression (or another depressive disorder) feel exhausted, worthless, helpless, and hopeless. These negative thoughts and feelings that are part of depression make some people feel like giving up. As treatment takes effect, these thoughts begin to go away. Some strategies that can help a person waiting for treatment to take effect include:

- setting realistic goals in the light of the depression and assuming a reasonable amount of responsibility;
- breaking large tasks into small ones, setting some priorities, and doing what one can reasonably do;
- trying to be with other people and to confide in someone—this is usually better than being alone and secretive;
- participating in activities that may make one feel better;
- getting some mild exercise, going to a movie or a ball game, or participating in religious, social, or other activities;
- expecting one's mood to improve gradually, not immediately (feeling better takes time);
- postponing important decisions until the depression has lifted and discussing big decisions with family or friends who have a more objective view of the situation;

- remembering that positive thinking will replace the negative thinking that is part of the depression as one's depression responds to treatment;
- allowing one's family and friends to help.

Attention Deficit Hyperactivity Disorder (ADHD)

Attention deficit hyperactivity disorder (ADHD) is the most commonly diagnosed behavioral disorder of childhood. In any six month period, ADHD affects an estimated 4.1% of youths aged 9 to 17. Boys are 2 to 3 times more likely than girls to develop ADHD. Although ADHD is usually associated with children, the disorder can persist into adulthood. One researcher estimated that as many as two-thirds of the children he evaluated with ADHD continued to have the disorder in their twenties, and that many of those who no longer fit the clinical description of ADHD nonetheless had significant problems at work or in other social settings.

The symptoms of ADHD. The three predominant symptoms of ADHD are impaired ability to regulate activity level (hyperactivity), to attend to tasks (inattention), and to inhibit behavior (impulsivity). Individuals who have ADHD may display predominantly hyperactive/impulsive behavior, predominantly inattentive behavior, or a combination of both. Children and adolescents with ADHD:

- are often unpopular among their peers;
- have trouble in school;
- have higher injury rates than their peers;
- have difficulty paying attention to details;
- are easily distracted;
- find it difficult and unpleasant to finish their schoolwork;

- put off things that require continued mental effort;
- make careless mistakes;
- are disorganized;
- appear not to listen when spoken to;
- fail to follow through on tasks.

Schizophrenia

Schizophrenia affects approximately 1% of the population, or 2.2 million U.S. adults. Men and women are equally affected. The illness usually emerges in young people in their teens or twenties. Although children over the age of five can develop schizophrenia, it is rare before adolescence. In children, the disease usually develops gradually and is often preceded by developmental delays in motor or speech development. Childhood-onset schizophrenia tends to be harder to treat and has a less favorable prognosis than the adult-onset form.

The symptoms of schizophrenia. There are many myths and misconceptions about schizophrenia. Schizophrenia is not a multiple or split personality, nor are individuals who have this illness constantly incoherent or psychotic. Although the media often portray individuals with schizophrenia as violent, in reality, very few affected people are dangerous to others. In fact, individuals with schizophrenia are more likely to be victims than perpetrators of violence.

Schizophrenia has severe symptoms. A diagnosis of schizophrenia requires that at least two of the following symptoms be present during a significant portion of a one-month period:

- delusions (false beliefs such as conspiracies, mind control, or persecution);

- hallucinations (usually voices criticizing or commenting on the person's behavior);
- disorganized speech (incomprehensible or difficult to understand);
- grossly disorganized or catatonic behavior;
- negative symptoms such as flat emotions, lack of facial expressions, and inattention to basic self-care needs such as bathing and eating.

The presence of either one of the first two symptoms is sufficient to diagnose schizophrenia if the delusions are especially bizarre or if the hallucinations consist of one or more voices that maintain a running commentary on the person's behavior or thoughts. The DSM-IV specifies additional criteria for a diagnosis of schizophrenia:

- social or occupational dysfunction;
- persistence of the disturbance for at least six months;
- exclusion of a mood disorder;
- exclusion of a substance-abuse or medical condition that causes similar symptoms;
- consideration of a possible pervasive developmental disorder.

The course of schizophrenia varies considerably from one individual to the next. Most people who have schizophrenia experience at least one, and usually more, relapses after their first psychotic episode. Relapses are periods of more intense symptoms of illness (hallucinations and delusions). During remissions, the negative symptoms related to emotion or personal care is usually still present. About 10% of patients remain severely ill for long periods and do not return to their previous state of mental functioning. Several long-term studies found that as many as one-third to one-half of

people with schizophrenia improve significantly or even recover completely from their illness.

You're the Expert Now

Learning the facts about mental illness can dispel misconceptions. The ability to evaluate scientific and health-related information is an important skill for students that they can apply throughout their lives.

Vignette #1: Schizophrenia – How it feels

As a young child, Kathryn felt afraid of people and depressed. She had the idea that if people really understood what she was like inside they would really hate her. Her childhood was spent hiding inside, not letting people know what was inside her. She never talked about her feelings. She had playmates who would share with her but she wouldn't share with them. She was teased in school. She would stuff her anger inside and tell herself it was her fault; if she had been more like others they would not pick on her; she accepted that she was a likely candidate to be picked on. This went on throughout high school and college.

In her freshman year at college, Kathryn's mind underwent a transformation; she no longer understood people in the world nor accepted them for the way they behaved toward her. She could not control her anger – something was coming out; she could not keep it down or squelch it. At this point, Kathryn knew she had crossed over from mental health to mental illness. She started thinking that now people were going to find out what she was really like inside and they were going to hate her. Shortly after that, she began to hear voices. The voices continued from then on. She heard voices from other people in the environment – mostly strangers; somebody walking by, or driving by.

To Kathryn, all this mimicked reality. At times, she knew she hallucinated something. She used to hear her father say, “I am sick of it. I am just sick of it”; she knew her father did not say that. She heard a neighbor say something to a friend about her, but she realized later the neighbor had not said that. She realized she was hallucinating. For the longest time Kathryn believed it was real; it was what was happening inside her; and she desired it. It was hard to diagnose. Even though she was hearing these voices, nobody really knew what was wrong with her. Her parents used to take her to a counselor who would talk to her. No matter how much they talked, they could not turn her thoughts around. Finally, her counselor told her parents she could not be helped.

Kathryn’s parents took her to a psychiatrist and within five minutes, the psychiatrist said she had schizoaffective disorder – schizophrenia and depression. He told her she needed medication and it was an illness she could get over; it was not something she was doomed to feel for the rest of her life. The idea that this was an illness was new to her and her family. The name schizophrenia, which explained what she was going through, was new to her and her family. Once she was on medication and it was strong enough, she noticed a very profound change in her thoughts. Before, her thought was like a whirlpool – just obsessing and thinking, “How can I get out of this? How can I change myself so people will not hate me? What can I do to deal with all this hatred?”

Kathryn remembered the first time, how she had lain in bed, feeling she had just been thrown up on the shore, after being shipwrecked in the sea with waves crashing over her and struggling to keep afloat. She now found herself on the beach – resting and feeling at peace. For the first time that she could remember, she had a good day. Having schizophrenia all her life made it easier to deal with it when it was at its worst because

she did not know what happiness was back then. She did not know what it was like to have peace of mind and happiness. Kathryn thought this was the way life was – hard. Now that she knows happiness and peace of mind, it would be difficult to go back and experience schizophrenia again.

Questions:

1. List some of the symptoms of schizophrenia that Kathryn exhibited.
2. Did Kathryn see or hear things that were not there (hallucination).
3. How did her illness affect Kathryn's thoughts and feelings?
4. Did counseling help Kathryn deal with her illness?
5. What treatment worked for Kathryn?
6. How has Kathryn's life changed after treatment?
7. Was Kathryn family supportive of her?
8. Based on Kathryn story, do you think it is important to seek treatment for mental illness?
9. How might Kathryn's life have been affected if she had not sought treatment?

Vignette #2: My Battle with Suicide and Depression

Jane is a teenager who has been going through friend and high school troubles. She has been depressed for two years and attempted suicide 22 times within the past year. However, she survived because she always gets scared at the last minute and gives up the attempt.

Jane does not have any friends anymore because they all left her when they found out about her illness. She feels low. She goes to YouTube to meet new people. She only has online friends and not regular friends anymore. She does not have anyone to hang out with on weekends and talk to about her feelings; she keeps all her feelings bottled up; she fakes smiles at school and on YouTube; she is not always happy; the person you see on YouTube is really who she wants to be. Jane acts as if she were very happy but she is not. She has a lot of issues with her mom and feels like she is not wanted and not loved. She is not popular at school and people know her only through YouTube. At school, Jane has no one to talk to or eat lunch with. She just walks around by herself and looks at other groups of friends; she cannot make any friends; no one in her grade accepts her; she is the girl that is always alone and it is horrible; it is hard; she sometimes thinks life is better without her. The friends Jane makes don't want to get to know her; when she gets depressed they don't understand and leave her. Jane usually spends weekends at home alone; she is never invited out; she is only occasionally invited to a birthday party.

Jane takes antidepressants and some other antipsychotic medications. She takes a special bipolar medicine that makes her feel better about herself. Her physicians monitor her blood because antidepressants can be toxic. Her arms are bruised from the syringes taking blood from her. She was in a mental hospital.

Questions:

1. What mental illness does Jane have?
2. What are some of the symptoms Jane exhibited in her story?
3. What are some of the difficulties that Jane's illness caused?
4. At what stage of life did Jane start experiencing her symptoms?

5. Do you think Jane's depression is why she does not have any friends?
6. What treatment did Jane use to help her deal with her illness?
7. Do you think that other people with the same diagnosis as Jane would exhibit similar symptoms?
8. Are people with depression often suicidal?

Reference

BSCS. (2005). *The Science of Mental Illness*. NIH publication No. 05-5482.

Appendix B: Recruitment Flyer

Walden University, MN, USA

Department of Educational Psychology

RESEARCH PARTICIPANTS NEEDED

I am looking for volunteers, aged 18 and older, to take part in a study about attitudes towards mental illness. This study will take place on your college campus. There will be a 1st survey and a 2nd survey. Only participants in the 1st survey will be allowed to do the 2nd survey.

As participants in the study, you will be asked to fill out questionnaires on your:

- Opinion regarding people with mental illness
- Attitude toward mental illness
- Willingness to seek help for mental illness, and
- Basic demographics – gender and age

The total time for completing the questionnaires on each survey is approximately 35mins.

Your participation will involve:

- Date of 1st survey: _____. The 1st survey will be handed out by the researcher who will be the only one at the secretary's office which you will fill out at your convenience and return to the researcher at the same location during the same day or the next day from 9am-5pm each day.
- Date of 2nd survey: _____. The 2nd survey will be handed out by the researcher who will be the only one at the secretary's office which you will fill out at your convenience and return to the researcher at the same location during the same day or the next day from 9am- 5pm each day.

Both 1st survey and 2nd survey participation is required in order to complete the study. In appreciation of your time, you will receive a pen at the completion of the 1st survey and also at the completion of the 2nd survey.

For more information about this study, or to volunteer for this study, please contact:
Claudette Thompson at 1-876-877-6215 or 1-516-456-3801, E-mail: Claudette.thompson@waldenu.edu.

This study has been reviewed by, and received ethics clearance through the Institutional Review Board at Walden University, Minneapolis, MN

Appendix C: Permission to Conduct Research at College

Bethlehem Moravian College
Malvern P.O., St. Elizabeth, JAMAICA WEST INDIES
TELEPHONE: (876) 618-5999, 966-5148/5760/5293; FACSIMILE: (876) 966-5157
EMAIL: bethlehem@cwjamaica.com /bmcadmin@cwjamaica.com

Letter of Cooperation

October 22, 2013

Dear Claudette Thompson,

Based on my review of your research proposal, I give permission for you (Claudette Thompson) to conduct the study entitled "Utilizing a Didactic Seminar to Change Attitudes About Mental Health Among College Students in Jamaica, West Indies" within the Bethlehem Moravian College. As part of this study, I authorize you to distribute research flyers on the college campus, conduct pre-test and post-test activities for the research outside of classroom hours, and disseminate the research result during devotional time which is also outside of regular class hours. Bethlehem Moravian College will present the Didactic Seminar activity on mental health according its policies and procedures. The college will allow you to invite students that attend the seminar to complete surveys for the research.Student's participation will be voluntary and at their own discretion for every aspect of the research, including the Didactic Seminar presented by the college which will be conducted outside of normal classroom hours.

We understand that our organization's responsibilities include: announcing the upcoming research activities, providing the room for conducting the research, presenting the Didactic Seminar activity. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Yvonne E. Clarke
YVONNE E. CLARKE
PRINCIPAL

Walden University
October 16, 2013

Dear Principal,

My name is Claudette Thompson and I am a doctoral student pursuing a degree in General Educational Psychology at Walden University, U.S.A. Before graduating I am required to complete a final research project. In 2010, you had given me permission to conduct my research at your institution. I also visited your college in April 2010. As a Jamaican who attended college in Jamaica, I savor the opportunity to complete my research with a Jamaican population. This dissertation will utilize student volunteers completing 1st survey and 2nd survey questionnaires on attitudes about mental illness. A didactic seminar on mental illness which will be implemented by your institution and it is not mandatory activity for participants in the study.

This research will take place over a period of 4 to 6 weeks, comprising one day of 1st survey for approximately 35 to 45 minutes; one day of optional didactic seminar attendance presented by your institution for approximately 2 to 2 ½ hours; and one day of 2nd survey for approximately 35 to 45 minutes, which will occur 4 weeks after the didactic seminar. All these activities will occur outside regular class time. I will need approximately 200 students over the age of 18 years to participate voluntarily in this research. The research procedure is outlined below.

Research Procedures:

On day 1, prospective participants in this study will be asked to:

- listen to explanation of the research for about 5 minutes;
- sign a voluntary informed consent form;
- complete 1st survey questionnaires for 35 to 45 minutes.

On day 2, prospective participants in this study will be asked to:

- participate optionally in a didactic seminar on mental illness for 2 to 2 ½ hours presented by Bethlehem Moravian College.

On day 3, after 4 to 6 weeks from the didactic seminar, all prospective participants in this study, including those who did not attend the didactic seminar, will be asked to:

- listen to explanation of the research for about 5 minutes;
- complete 2nd survey questionnaires for 35 to 45 minutes.

Please review the above information to see if you can accommodate my request for conducting the research at your college. I am awaiting final approval from the Walden University Review Board, at which time I can send you a copy of a completed “Informed Consent” form.

I am looking forward to conducting this research at your college and hereby request written permission to do so.

Thanks for your generous help.

Sincerely,

Claudette Thompson
Ph. D. General Educational Psychology
Walden University
1-516-456-3801

Appendix D: Demographic Information

Please check one of the following:

1. What is your gender?

□ Male

□ Female

---

2. What is your age?

_____

Appendix E: Permission to use Attitudes to Mental Illness Scale

Dear Claudette

Thank you for your email and your interest in the AMIQ. You may use the AMIQ in your own research in the manner you describe. Please ensure that you include a full reference in any written or published work that you produce.

With kind regards
Lucy

Lucy Alexander
Rights and Permissions Manager
Royal College of Psychiatrists
http://www.rcpsych.ac.uk
tel: +44 (0)20 7235 2351 ext 6144

Please note that I am in the office on Tuesday and Thursday.

From: Claudette Thompson [mailto:claudettetho@yahoo.com]
Sent: 26 July 2012 23:42
To: Permissions
Subject: Permission to use AMIQ scale

To whom it may concern,

My name is Claudette Thompson a doctoral student at Walden University and is hereby requesting permission to use Test Instrument: **Attitudes to Mental Illness Questionnaire (AMIQ)** in my dissertation. The article: **Validation of a short instrument to measure stigmatized attitudes towards mental illness;** author: Jason Luty, Daniel Fekadu, Okon Umoh and John Gallagher (2006); publisher - *Psychiatric Bulletin* 2006, 30:257-260.

Please see attachment of the AMIQ scale as to how I would like to utilize it in my research.

Thanks and awaiting your response.

Claudette Thompson
ID: 0382749
Ph. D. General Educational Psychology
Walden University

Appendix F: Attitudes to Mental Illness Scale

Please read the following statement:

Michael has schizophrenia. He needs an injection of medication every 2 weeks. He was detained in hospital for several weeks 2 years ago because he was hearing voices from the devil and thought he had the power to cause earthquakes. He has been detained in the past under the Mental Health Act of 1983.

Please select the answer which best reflects your views:

1. Do you think this illness would damage Michael's career?

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree □ Don't know

---

2. I would be comfortable if Michael were my colleague at work.

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree □ Don't know

---

3. I would be comfortable inviting Michael to a dinner party.

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree □ Don't know

---

4. How likely do you think it would be for Michael's wife to leave him?

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree □ Don't know

---

5. How likely do you think it would be for Michael to get in trouble with the law?

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree □ Don't know

---

Appendix G: Permission to use Opinion about Mental Illness Scale

YAHOO! MAIL Classic

FW: Permission to use a scale (MH) Thursday, September 13, 2012 5:47 PM

From: "Din, Jia" <jdin@apa.org>
To: claudettetho@yahoo.com
1 File (40KB)

image006.p

From: Din, Jia
Sent: Thursday, September 13, 2012 1:47 PM
To: 'claudette.thompson@waldenu.edu'
Subject: FW: Permission to use a scale (MH)

From: Din, Jia
Sent: Wednesday, September 05, 2012 3:50 PM
To: 'claudette.thompson@waldenu.edu'
Cc: Thomas, Karen
Subject: RE: Permission to use a scale (MH)

File: Walden University

RE: Opinions about mental illness in the personnel of two large mental hospitals. Cohen, J.; Struening, E. L. The Journal of Abnormal and Social Psychology, Vol 64(5), May 1962, 349-360. doi: 10.1037/h0045526

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Thank you,

Jia Din
Permissions Associate, Permissions Office
American Psychological Association
750 First Street, NE
Washington, DC 20002
phone: 202.336.5632
fax: 202.336.5633
jdin@apa.org

From: Permissions
Sent: Thursday, July 26, 2012 3:36 PM
To: Claudette Thompson
Cc: Permissions
Subject: RE: Permission to use a scale (MH)

Dear Claudette Thompson,
Thank you for your recent permission request to APA. This note acknowledges the receipt of your email. Your request is copied or provided in the email below.

If you write back to us about the status of your request, please provide the following date as our reference number: **July 26**, and include this email in your reply. We are now working on permissions submitted approximately 4 weeks ago and we will handle yours in turn unless you have a more pressing and critical deadline. We apologize for the delay.

****If you have a critical deadline, please email kthomas@apa.org**

****If you have questions or concerns regarding this permission request, please send your response to permissions@apa.org.**

Sincerely,

Myra Holmes

Myra Holmes | Copyright and Permissions
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American Psychological Association

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For Use of APA Material

Date: 07/18/2012

Your contact information:
Name: Claudette Thompson
Organization name: Walden University
Department:
Complete postal address: 945 Bard Road, Westbury, New York, 11590
Country: USA
Office phone:
Fax number:
Email: claudette.thompson@waldenu.edu or claudettetho@yahoo.com
Your reference code number (if required):

1. **The APA material you want to use:** Cohen, J., & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. Journal of Abnormal & Social Psychology, 64 (5), 349-360.
Complete citation (Ex: URL, Title, Source, Author, Publication year, Pagination, etc.)

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¨ 2 semesters (12 months)
Instructor's name:
Number of students enrolled:

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¨ Online CE course
Organization:
Course name:
Course start date:

¨ 6 months ¨ 12 months ¨ Other / Please specify:

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¨ Other / Please give details:

5. Any additional information to tell us: I will conducting my research at college in Jamaica and will be using the instruments to conduct a pretest and posttest.
I have attached copy of how the instrutment will be utilized in my research.

Items on OMIQ Scale

Appendix ?

Factor A

Please read the following statements and select the answer which best reflects your views.

1. A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

2. All patients in mental hospitals should be prevented from having children by a painless operation.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

3. There is something about mental patients that makes it easy to tell them from normal people.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

4. People with mental illness should never be treated in the same hospital as people with physical illness.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

5. Mental illness is usually caused by some disease of the nervous system.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

6. It is easy to recognize someone who once had a serious mental illness.

   □ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

7. Nervous breakdowns usually result when people work too hard.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

8. People who are mentally ill let their emotions control them; normal people think things out.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

9. Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

10. One of the main causes of mental illness is a lack of moral strength or will power.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

11. Every mental hospital should be surrounded by a high fence and guards.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

12. People would not become mentally ill if they avoided bad thoughts.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

13. The best way to handle patients in mental hospitals is to keep them behind locked doors.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

14. Although some mental patients seem all right, it is dangerous to forget for a month that they are mentally ill.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

15. College professors are more likely to become mentally ill than are business men.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

16. Regardless of how you look at it, patients with severe mental illness are no longer really human.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

17. The patients of a mental hospital should have something to say about the way the hospital is run.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

Factor B

18. Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

19. There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

20. Patients in mental hospitals are in many ways like children.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

21. To become a patient in a mental hospital is to become a failure in life.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

22. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

23. Although they usually aren't aware of it, many people become mentally ill to avoid the difficult problems of everyday life.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

24. More tax money should be spent in the care and treatment of people with severe mental illness.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

25. Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

Factor C

26. More tax money should be spent in the care and treatment of people with severe mental illness.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

27. If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

28. Most women who were once patients in a mental hospital could be trusted as baby sitters.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

29. Many mental patients are capable of skilled labor, even though in some ways they are very

disturbed mentally.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

30. Many people who have never been patients in a mental hospital are more mentally ill than many hospitalized mental patients.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

31. Many mental patients would remain in the hospital until they were well, even if the doors were unlocked.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

32. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

33. Mental illness is an illness like any other.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

34. The patients of a mental hospital should have something to say about the way the hospital is run.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

Factor D

35. A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

36. Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

37. People who have been patients in a mental hospital will never be their old selves again.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

38. There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

39. The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

40. Most women who were once patients in a mental hospital could be trusted as baby sitters.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

41. The small children of patients in mental hospitals should not be allowed to visit them.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

42. Most patients in mental hospitals don't care how they look.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

43. All patients in mental hospitals should be prevented from having children by a painless operation.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

44. Many patients in mental hospitals make wholesome friendships with other patients.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

Factor E

45. Mental patients come from homes where the parents took little interest in their children.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

46. The mental illness of many people is caused by the separation or divorce of their parents during childhood.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

47. If parents loved their children more, there would be less mental illness.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

48. If the children of mentally ill parents were raised by normal parents, they would probably not become mentally ill.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

49. If the children of normal parents were raised by mentally ill parents, they would probably become mentally ill.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

50. Although they usually aren't aware of it, many people become mentally ill to avoid the difficult problems of everyday life.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

51. People who are successful in their work seldom become mentally ill.

□ Strongly disagree □ Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

From: Claudette Thompson [mailto:claudettetho@yahoo.com]
Sent: Thursday, July 26, 2012 12:31 PM
To: Permissions
Subject: Permission to use a scale

To whom it may concern,

Good afternoon. I am a doctoral student at Walden university and is requesting permission to use the scales by Cohen & Struening, 1962. Please see attachments the consent form and the items for OMIQ scale that I would like to use in my research.

Thanks in advance and awaiting your response.

Claudette Thompson

Appendix H: Opinion about Mental Illness Scale

Please read the following statements and select the answer which best reflects your views:

Factor A

1. A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

2. All patients in mental hospitals should be prevented from having children by a painless operation.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

3. There is something about mental patients that makes it easy to tell them from normal people.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

4. People with mental illness should never be treated in the same hospital as people with physical illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

5. Mental illness is usually caused by some disease of the nervous system.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

6. It is easy to recognize someone who once had a serious mental illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

7. Nervous breakdowns usually result when people work too hard.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

8. People who are mentally ill let their emotions control them; normal people think things out.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

9. Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

10. One of the main causes of mental illness is a lack of moral strength or will power.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

11. Every mental hospital should be surrounded by a high fence and guards.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

12. People would not become mentally ill if they avoided bad thoughts.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

13. The best way to handle patients in mental hospitals is to keep them behind locked doors.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

14. Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

15. College professors are more likely to become mentally ill than are business men.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

16. Regardless of how you look at it, patients with severe mental illness are no longer really human.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

17. The patients of a mental hospital should have something to say about the way the hospital is run.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

Factor B

18. Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

19. There is little that can be done for patients in a mental hospital except to see that they are comfortable and well-fed.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

20. Patients in mental hospitals are in many ways like children.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

21. To become a patient in a mental hospital is to become a failure in life.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

22. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

23. Although they are not usually aware of it, many people become mentally ill to avoid the difficult problems of everyday life.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

24. More tax money should be spent in the care and treatment of people with severe mental illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

25. Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

Factor C

26. More tax money should be spent in the care and treatment of people with severe mental illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

27. If our hospitals had enough well-trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

28. Most women who were once patients in a mental hospital could be trusted as baby sitters.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

29. Many mental patients are capable of skilled labor, even though in some ways they are very disturbed mentally.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

30. Many people who have never been patients in a mental hospital are more mentally ill than many hospitalized mental patients.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

31. Many mental patients would remain in the hospital until they were well, even if the doors were unlocked.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

32. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

33. Mental illness is an illness like any other.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

34. The patients of a mental hospital should have something to say about the way the hospital is run.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

Factor D

35. A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

36. Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

37. People who have been patients in a mental hospital will never be their old selves again.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

38. There is little that can be done for patients in a mental hospital except to see that they are comfortable and well-fed.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

39. The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

40. Most women who were once patients in a mental hospital could be trusted as baby sitters.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

41. The small children of patients in mental hospitals should not be allowed to visit them.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

42. Most patients in mental hospitals don't care how they look.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

43. All patients in mental hospitals should be prevented from having children by a painless operation.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

44. Many patients in mental hospitals make wholesome friendships with other patients.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

Factor E

45. Mental patients come from homes where the parents took little interest in their children.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

46. The mental illness of many people is caused by the fact that, during their childhood, their parents were divorced or separated.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

47. If parents loved their children more, there would be less mental illness.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

48. If the children of mentally ill parents were raised by normal parents, they would probably not become mentally ill.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

49. If the children of normal parents were raised by mentally ill parents, they would probably become mentally ill.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

50. Although they are not usually aware of it, many people become mentally ill to avoid the difficult problems of everyday life.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

51. People who are successful in their work seldom become mentally ill.

□ Strongly disagree □Disagree □ Partly disagree □ Partly agree □ Agree □ Strongly agree

---

Appendix I: Help Seeking Attitudes Scale

The following are some attitudes toward seeking psychological help (professional assistance for emotional problems with a social worker, psychiatrist, psychologist, counselor, etc.). Please check whether you agree, partly agree, partly disagree, or disagree with each statement.

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

   □ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

   □ Agree □ Partly agree □ Partly disagree □ Disagree

---

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.

   □ Agree □ Partly agree □ Partly disagree □ Disagree

---

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.

   □ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

□ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

□ Agree □ Partly agree □ Partly disagree □ Disagree

---

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.

□ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

□ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

□ Agree □ Partly agree □ Partly disagree □ Disagree

---

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

□ Agree □ Partly agree □ Partly disagree □ Disagree

Appendix J: Permission for Help Seeking Attitudes Scale

YAHOO! MAIL Classic

Re: Permission to use HSAS Tuesday, August 7, 2012 9:20 PM

From: "Vernon Wall" <vwall@acpa.nche.edu>

To: "Claudette Thompson" <claudettetho@yahoo.com>

Permission granted.

Acknowledge: Reprinted with permission from the American College Personnel Association (ACPA), One Dupont Circle, NW at the Center for Higher Education, Washington, DC 20036.

Vernon

On Thu, Jul 26, 2012 at 6:17 PM, Claudette Thompson <claudettetho@yahoo.com> wrote:

> Hello Mr. Vernon Wall,
>
> My name is Claudette Thompson a doctoral student at Walden University and is hereby requesting permission to use Edward H. Fischer & Amerigo Farina (1995), Test Instrument: **Help Seeking Attitudes Scale (HSAS)** – 10-item in my dissertation. Please see attachment of the instrument as to how I am requesting permission to utilize it in my research.
>
> Thanks and awaiting your response.
>
> Claudette Thompson

--

ACPA College Student Educators International

Vernon A. Wall
Senior Director
Professional Development, Research & Scholarship
ACPA - College Student Educators International
at the National Center for Higher Education
One Dupont Circle NW, Suite 300
Washington, DC 20036, USA
t 1-202-835-2272 x608 | f 1-202-296-3286

Appendix K: List of Participants

Participants' Information for Research: Utilizing Didactic Seminar to Change Attitudes about Mental Health among College Students in Jamaica, West Indies				
Name / email address	Code	1st survey Packet #	Didactic Seminar (Y/N)	2nd survey Packet #
	001			
	002			
	003			
	004			
	005			
	006			
	….			
	200			

Appendix L: Permission for Didactic Seminar

YAHOO! MAIL Classic

RE: Your permission request Thursday, September 6, 2012 10:14 PM

From: "Stacey Luce" <sluce@bscs.org>
To: "Claudette Thompson" <claudettetho@yahoo.com>
1 File (79KB)

BSCS Permi

Claudette,
Please see the attached permission document in response to your request. Let me know if you have any questions about it.

Best regards,
Stacey

Stacey Luce
Production Coordinator

BSCS
5415 Mark Dabling Blvd.
Colorado Springs, CO 80918
719.531.5550 main phone • ext 131
sluce@bscs.org • www.bscs.org

From: Claudette Thompson [mailto:claudettetho@yahoo.com]
Sent: Wednesday, September 05, 2012 11:18 AM
To: Stacey Luce
Subject: RE: Your permission request

Hello Stacy Luce,

Good afternoon and it was a pleasure speaking with you. My name is Claudette Thompson, a doctoral student at Walden University. I am hereby requesting permission to use "The Science of Mental Illness" teaching module in as part of the intervention in my dissertation. I will be doing a seminar on mental illness as the intervention in my research and will be doing a pretest prior to the seminar and the posttest after the seminar. I would like to use the teaching module in my seminar and will attach it as an appendice to my proposal. It will entail talking about mental illness to students at teacher's college in Jamaica, West Indies and my participants in the study will be recruited from that student body. I find that BSCS teaching module teaching module will be ideal to what I want share with the students.

Please see attachment of the teaching module as to what aspect of it I would like to utilize it in my seminar on mental illness.

Thanks for your cooperation and looking forward to your response.

Claudette Thompson
--- On **Wed, 9/5/12, Stacey Luce** <sluce@bscs.org> wrote:

> From: Stacey Luce <sluce@bscs.org>
> Subject: RE: Your permission request
> To: "claudettetho@yahoo.com" <claudettetho@yahoo.com>
> Date: Wednesday, September 5, 2012, 4:30 PM
>
> **From:** Stacey Luce
> **Sent:** Friday, July 20, 2012 12:43 PM
> **To:** 'claudette.tho@yahoo.com'
> **Subject:** Your permission request
>
> Hello,

I picked up your voicemail regarding permission to use BSCS material. Please send me an email with details of your request. Specifically, what material do you want to use (publication title, pages/sections, etc.)? How do you want to use the material? I think you said something about a dissertation (it was hard to understand your voicemail at times). Also, what is your deadline?

Once I get these details, I'll let you know if there is more information I need.

Thank you,
Stacey

Stacey Luce
Production Coordinator

BSCS
5415 Mark Dabling Blvd.
Colorado Springs, CO 80918
719.531.5550 719.531.5550 main phone • ext 131
sluce@bscs.org • www.bscs.org

BSCS
A SCIENCE EDUCATION CURRICULUM STUDY

BSCS Permission Form

Request Date:	5 September 2012
Requested By:	Claudette Thompson claudettetho@yahoo.com
Description:	*The Science of Mental Illness*: NIH5 module
For Use In:	part of the intervention in requestor's dissertation: "I will be doing a seminar on mental illness as the intervention in my research and will be doing a pretest prior to the seminar and the posttest after the seminar. I would like to use the teaching module in my seminar and will attach it as an appendice to my proposal. It will entail talking about mental illness to students at teacher's college in Jamaica, West Indies and my participants in the study will be recruited from that student body."
Use Requirements:	Credit as shown below must be obviously given in relation to the *Science of Mental Illness* materials. Also include the reference in the Material Source paragraph of your document. Any other use requires new permission.
Credit Line:	Copyright © 2005 BSCS. All rights reserved. Adapted with permission.
Reference:	BSCS. (2005). *The Science of Mental Illness*. NIH publication No. 05-5482.

Signed:

Stacey Luce
Production Coordinator
6 September 2012

Appendix M: List of Mental Health Professional Available to Participants

List of Mental Health Professional in Jamaica, West Indies		
Name	Profession	Services
St. Elizabeth Health Dept., High St. Black River St. Elizabeth, Jamaica W.I. 1-876-965-2266	Medical & Mental Health	Health Clinic
Mental Health Support Group 46 Lady Musgrave Road, Kingston 10 1-876-946-9489	Mental Health Advocacy	Mental Health Support
Black River Hospital 45 High Street, Black River, St. Elizabeth, Jamaica W.I 1-876-965-2212 1-876-965-2224	General Hospital	Medical & Mental Health

Appendix N: Informed Consent Form

Dear Sir/Madam,

You are invited to take part in a research study that will examine attitudes of college students towards mental illness. You were chosen for the study because you are a student who attends the college and is 18 years old or older. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether or not to take part.

Background Information:

This study is being conducted by Claudette Thompson in fulfillment of the dissertation process at Walden University. The purpose of this study is to find out the attitudes of college students toward mental illness and if there is a difference in gender on attitudes towards mental illness. This study will either support or counter the hypothesis of the effect of education on attitudes of college students toward mental illness.

I will be using three questionnaires that will compare measurements for 1st survey and 2nd survey on attitudes about mental illness as measured by the Help Seeking Attitudes Scale, Attitudes to Mental Illness Questionnaire, and Opinion about Mental Illness Scale.

Procedures:

If you agree to participate in this study, you will be given questionnaires by the researcher who will be the only one at the secretary's office which you will fill out at your convenience and return to the researcher at the same location during the same day or the next day. You will be asked to answer questions in the 1st survey and 2nd survey questionnaires on your:

- Opinion regarding people with mental illness
- Attitude toward mental illness
- Willingness to seek help for mental illness
- Basic demographics – gender and age.
- Your participation will involve:
    - A 1st survey
    - A 4 – 6 weeks waiting period for the 2nd survey

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision as to whether or not you want to be in the study. The survey has been designed to protect your privacy. Participants' names will be removed from the study once the 2nd survey is completed. No one at the college or from my institution (Walden University) will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study, you may withdraw at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:

Participating in this study will involve little or no risk. The only potential risk is that you might find certain questions to be sensitive, but, as described below, your confidentiality will be ensured. Participants in this study will benefit by increasing their awareness about mental health. In appreciation of your time, you will receive a pen at the completion of each survey.

Confidentiality:

Extreme precaution will be taken to make sure that the identity of every participant is protected until identifying information is removed after the 2nd survey is completed. I will not use your information for any purpose outside of this research project. Furthermore, I will not use your name; neither will other information be included anywhere that can identify you in any reports on this study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me at 1-876-877-6215 or 1-516-456-3801 or Claudette.thompson@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is 11-25-13-0070926 and it expires on November 24, 2014.

The researcher will give you a copy of this form to keep.

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Printed Name of Participant: _____

Date of consent: _____

Participant's Written Signature: _____

Researcher's Written Signature: _____

Appendix O: Research Information Sent to College

Walden University
October 14, 2013
Dear Principal,

My name is Claudette Thompson and I am a doctoral student pursuing a degree in General Educational Psychology at Walden University, U.S.A. Before graduating I am required to complete a final research project. In 2010, you had given me permission to conduct my research at your institution. I also visited your college in April 2010. As a Jamaican who attended college in Jamaica, I savor the opportunity to complete my research with a Jamaican population. This dissertation will utilize student volunteers completing pretest and posttest questionnaires on attitudes about mental illness. The previous permission your college gave me to conduct the research has expired and needs to be reissued. I am seeking the college's agreement to implement and oversee the non-mandatory didactic seminar activity on mental health according your policies and procedures and then allow me to invite students that attend the seminar to complete surveys for the research.

This research will take place over a period of 4 to 6 weeks, comprising of one day of pretest for approximately 35 to 45 minutes; one day of optional didactic seminar attendance presented by your institution for approximately 2 to 2 ½ hours; and one day of posttest for approximately 35 to 45 minutes, which will occur 4 to 6 weeks after the didactic seminar. All these activities will occur outside regular class time. I will need approximately 200 students over the age of 18 years to participate voluntarily in this research. The research procedure is outlined below.

Research Procedures:

On day 1, prospective participants in this study will be asked to:

- listen to explanation of the research for about 5 minutes;
- sign a voluntary informed consent form;
- complete pretest questionnaires for 35 to 45 minutes.

On day 2, prospective participants in this study will be asked to:

- participate optionally in a didactic seminar on mental illness for 2 to 2 ½ hours presented by Bethlehem Moravian College.

On day 3, after 4 to 6 weeks from the didactic seminar, all prospective participants in this study, including those who did not attend the didactic seminar, will be asked to:

- listen to explanation of the research for about 5 minutes;
- complete posttest questionnaires for 35 to 45 minutes.

Please review the above information to see if you can accommodate my request for conducting the research at your college. I am awaiting final approval from the Walden University Review Board, at which time I can send you a copy of a completed "Informed Consent" form.

I am looking forward to conducting this research at your college and hereby request written permission to do so. Please see attached consent form.

Thanks for your generous assistance and your immediate attention will be highly appreciated.

Sincerely,

Claudette Thompson
Ph. D. Student, General Educational Psychology
Walden University
1-516-456-3801

Appendix P: Research Request Sent to Ministry of Education

Ministry of Education, Jamaica
The Director of Education
September 24, 2013

Dear Ms. Elaine Foster-Allen:

My name is Claudette Thompson and I am a Jamaican living in the USA. I am a doctoral student at Walden University, USA. My specialization is Educational Psychology. I would like to conduct my research in Jamaica for the fulfillment of my degree. I am hereby seeking permission from you, the Ministry of Education to conduct my research in Jamaica at Bethlehem Moravian Teachers' College in St. Elizabeth. I was given a written permission by the principal and was informed that I also needed to get permission from the Ministry of Education. The title of my dissertation is **"**Utilizing a Didactic Seminar to Change Attitudes about Mental Health among College Students in Jamaica, West Indies."

The goal of this research is to assess the impact of educational intervention by the college in changing attitudes of students toward people with mental illness. This research will compare attitudes towards mental illness before and after a didactic session on mental health. The participants will be given three questionnaires on Attitude to Mental Illness Scale (AMI; Luty et al., 2006), Opinion About Mental Illness Scale (OMI; Cohen & Struening, 1962; Struening & Cohen, 1963), and Help Seeking Attitudes Scale (Fischer & Farina, 1995). After the 1st survey questionnaire there will be a didactic seminar followed by a 2nd survey 4-6 weeks later. The didactic seminar will include handouts on the definition, causes, types, diagnoses, risk factors, treatment, stigma, etc., of mental illness. It will be held at Bethlehem Moravian Teachers' College in Jamaica, West Indies for one session with duration of 2 to 2 ½ hours. The seminar will be conducted by a qualified professional with a Doctorate in Ministry (focus on marriage and family); and a Master of Science in Psychology.

This study will involve minimal or no risks to the participants and will require 200 students volunteers. The ethical guidelines are as follows: written informed consent and its verbal explanation will be conducted in English, which is the official language of Jamaica; the researcher is a Jamaican who grew up in Jamaica and attended college in Jamaica; only adult participants will be solicited; after collection of the data, they will be immediately stored in a briefcase until they can be stored in a locked filing cabinet. The attached informed consent has additional details.

The objective of this study is to achieve positive social change through exploration of a specific educational intervention in combatting stigmatization of mental illness. Most of all that future educational methods could be formulated based on the success or failure of this intervention.

Your immediate attention will be highly appreciated as I am awaiting consent from you to proceed with this study and please see attached sample consent letter.

Thanks for your cooperation.

Sincerely,

Claudette Thompson
1-516-456-3801
claudette.thompson@waldenu.edu

Appendix Q: Permission Letter to Researcher

Gmail

Jennees Reid <jnnssreid@gmail.com>

Fw: Fwd: Letter for Claudette Thompson

1 message

claudettetho@yahoo.com <claudettetho@yahoo.com> Fri, Oct 4, 2013 at 9:29 AM
Reply-To: claudettetho@yahoo.com
To: Jennees Reid <jnnssreid@gmail.com>

Please see attachment!
Sent from my Verizon Wireless BlackBerry

From: Viviene Johnson <viviene.johnson@moey.gov.jm>
Date: Fri, 4 Oct 2013 07:53:44 -0500
To: Claudette Thompson<claudettetho@yahoo.com>
Cc: Barbara Allen<Barbara.Allen@moey.gov.jm>
Subject: Fwd: Letter for Claudette Thompson

Ms. Thompson

Please see the attached documents.

Regards

Viviene

--
Viviene Johnson
Director
Policy Analysis, Research and Statistics Unit
Planning and Development Division
Ministry of Education
4th Floor, Building One
2A National Heroes Circle
Kingston 4

Tel. 612 5842
Email: viviene.johnson@moey.gov.jm Web: www.moey.gov.jm

Social Media:
http://www.facebook.com/moejamaica
http://www.youtube.com/moejamaica
http://www.twitter/moejamaica

Ministry of Education, Priority Policies:

- Early Childhood Sector
- Special Education
- Media and ICT in Education

- Teacher Quality
- Tertiary Sector
- Infusion of TVET in the school system

3 attachments

PERMISSION TO Claudette Thompson.pdf
149K

Permission letter for Claudette Thompson.pdf
144K

Guidelines for conducting Research at the Ministry of Education June 2013.pdf
296K

MINISTRY OF EDUCATION

Reply or subsequent reference to this communication should be made to the Permanent Secretary and the following reference quoted:

2-4 National Heroes Circle
Kingston 4, Jamaica
Tel: 876-612-5792-5
Fax: 876-967-1837
www.moe.gov.jm

October 3, 2013

Dear Ms. Claudette Thompson:

This serves to acknowledge receipt of your letter requesting permission to conduct a study with research titled **"Utilizing a Didactic Seminar to Change Attitudes about Mental Health among College Students in Jamaica, West Indies".**

As cited, your research will cover the following institution: **Bethlehem Moravian Teachers' College.**

Kindly be advised that the Ministry has granted permission for you to proceed with this research, with the understanding that confidentiality and anonymity be maintained. Please find a copy of the **Guidelines for conducting Research at the Ministry of Education (Draft).** We would appreciate you forwarding a copy of the findings of this survey.

All the best in completing your dissertation

Grace McLean (Mrs.)
Chief Education Officer

Copy: Ms. Dorrett Campbell – DCEO – Schools' Operation Unit

Appendix R: Permission Letter for Researcher

MINISTRY OF EDUCATION

Reply or subsequent reference to this communication should be made to the Permanent Secretary and the following reference quoted:

No.

2-4 National Heroes Circle
Kingston 4, Jamaica
Tel: 876-612-5792-5
Fax: 876-922-5577
www.moe.gov.jm

October 3, 2013

The Principal
Bethlehem Moravian Teachers' College
Malvern P.O.
St. Elizabeth

Dear Principal,

The bearer of this letter, Ms. Claudette Thompson, is a Jamaica PhD candidate attached to the Walden University, USA.

Her thesis is entitled **"Utilizing a Didactic Seminar to Change Attitudes about Mental Health among College Students in Jamaica, West Indies"**

She has been granted permission by the Ministry of Education to conduct a data collection exercise at your institution.

Please extend to her the necessary courtesy that will facilitate her research. It is understood that upon completion of the study, Ms. Thompson will provide your institution with an overall report of school-specific findings and recommendations

Attached is the permission letter from the Ministry.

Grateful for your usual support.

Yours sincerely,

Grace McLean (Mrs.)
Chief Education Office

Copy: Ms. Dorrett Campbell, Deputy Chief Education Officer, School's Operations Unit

Appendix S: Certificate of Researcher's Online Training on Human Subject Protection

fhi360

THE SCIENCE OF IMPROVING LIVES

FHI 360

certifies that

Claudette J. Thompson

has completed the

RESEARCH ETHICS TRAINING CURRICULUM

Second Edition - 08/28/2012

Appendix T: Histogram of Dependent Variables Scores

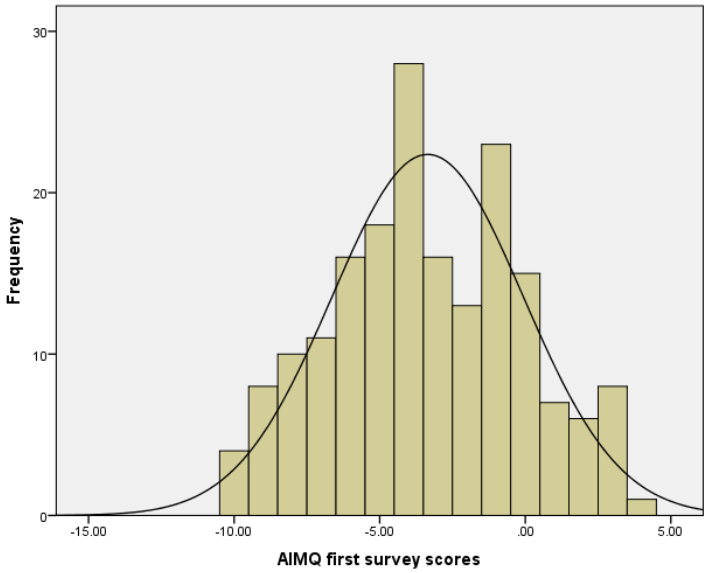

Figure 2. Histogram of AIMQ first survey scores.

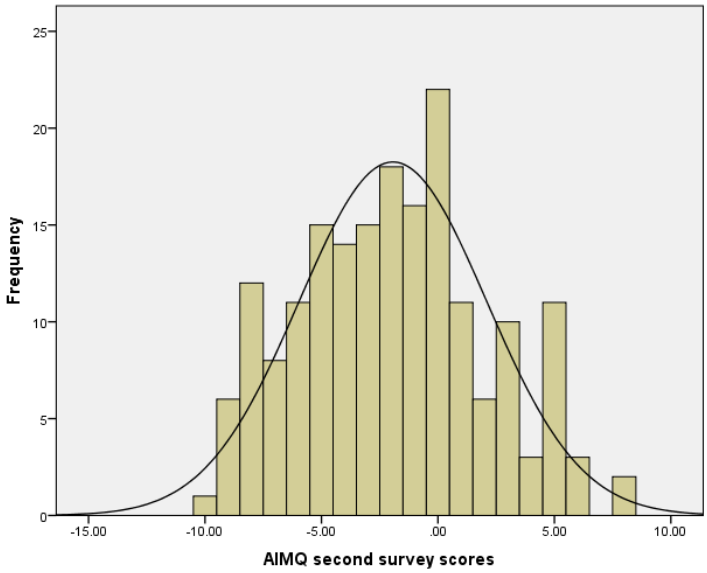

Figure 3. Histogram of AIMQ second survey scores.

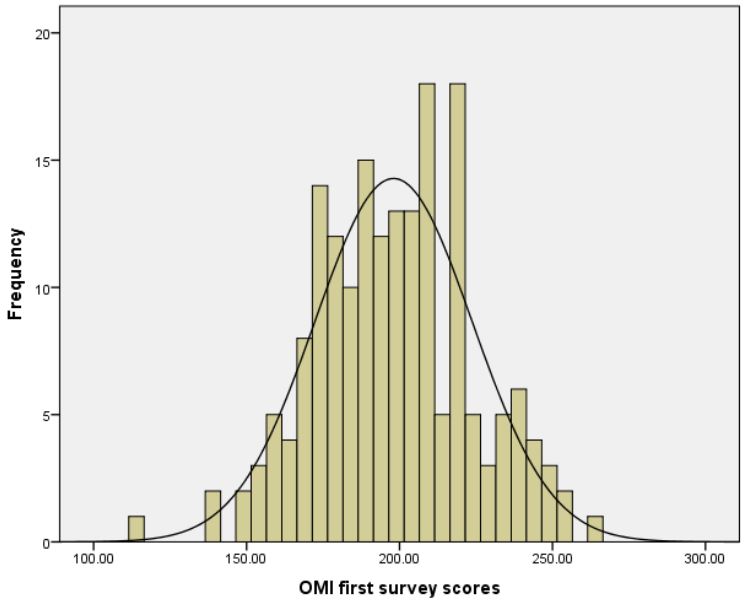

Figure 4. Histogram of OMI first survey scores.

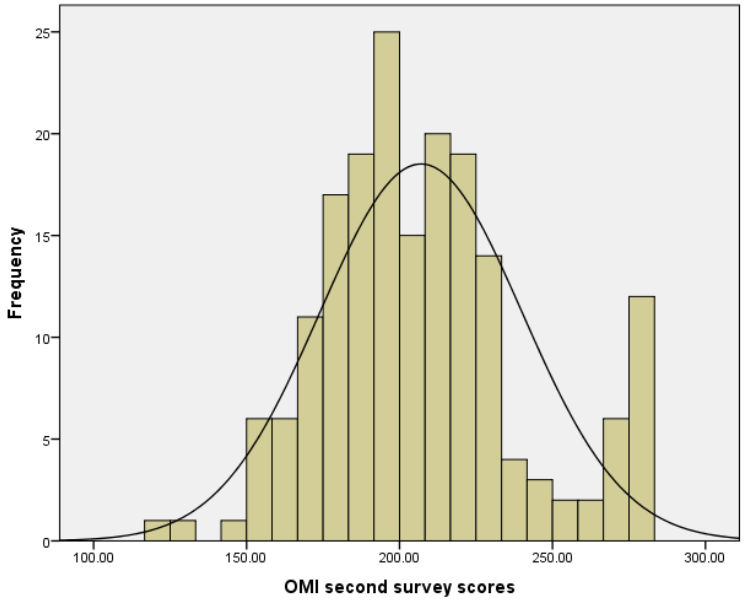

Figure 5. Histogram of OMI second survey scores.

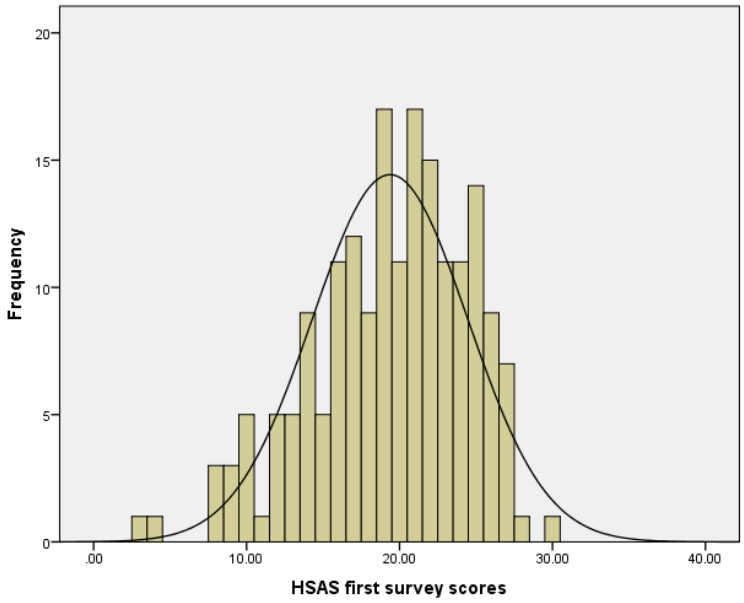

Figure 6. Histogram of HSAS first survey scores.

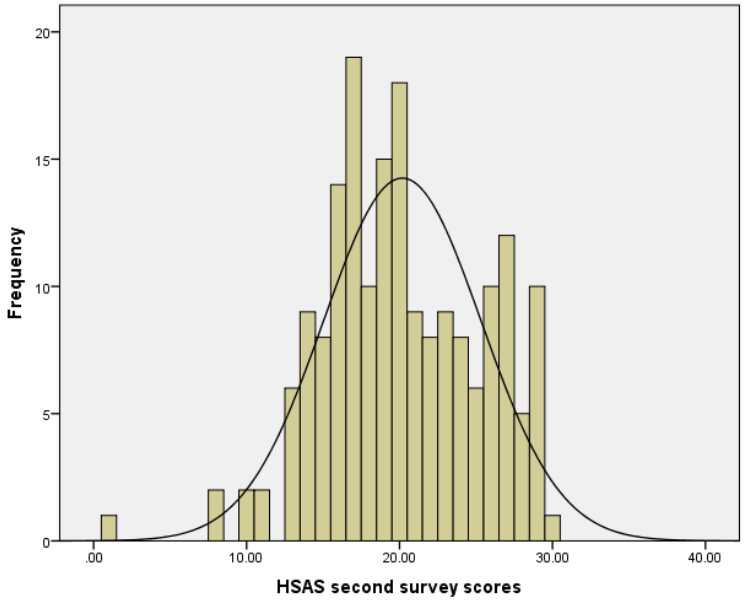

Figure 7. Histogram of HSAS second survey scores.

Curriculum Vitae

Claudette Thompson, MA, BSc

claudettetho@yahoo.com

claudette.thompson@waldenu.edu

EDUCATION:

2008 – Present **Doctoral Student. PhD in Psychology**

Walden University, Minneapolis, MN
Concentration: Educational Psychology
Dissertation topic: Utilizing didactic seminar on attitudes of college students towards mental illness.

Anticipated Date of Graduation: May 2014

01/2008 **Master of Arts, Psychology**
Alliance Theological College**,** New York, NY

01/1996 **Master of Arts, Nursing Education**
New York University**,** New York, NY

06/1990 **Bachelor of Science, Nursing**
Health Science Center, Downstate SUNY, Brooklyn, NY

12/1987 **Associate of Arts, Nursing**
Queensborough Community College, Bayside, NY

CAREER HISTORY & ACCOMPLISHMENTS:

06/1986 to Present **Self-Employed Registered Nurse**

- Organize and lead a number support groups per time period in subjects related to physical and emotional health to ensure long-term patient well-being.
- Do Pharmacological and non-pharmacological management, treatment of various disorders, and diseases.
- Observe and monitor client behavior and responses to treatment.
- Record clients' information on special flow sheets, accurately indicating suicidal precautions, sleep flow, and restraints.

- Possess self-direction with astute judgment skills and high level of personal accountability.
- Monitor clients' census by using the Daily Movement Report and recording admissions, discharges, doctor appointments, and site visit data.
- Ensure HIPAA compliance.
- Facilitate a smooth discharge by encouraging and reassuring clients throughout their transitions.
- Conducts therapeutic individual and family therapy sessions.
- Provide strong leadership for nursing personnel assignments to the unit/shift.
- Schedule patient admissions and discharges.

09/2000 to 08/2005 **Visiting Nurse, Winthrop**
University Hospital, Mineola, NY

- Developed patient care plans, including assessments, evaluations and nursing diagnoses.
- Documented patient information obtained from interviews.
- Ensured efficacy of treatments through monitoring of treatment regimens.
- Demonstrated ability to lead and motivate outstanding healthcare teams.
- Demonstrated effective counseling in health maintenance and disease management.
- Followed infection control procedures.
- Gained extensive experience working in homes with disabled children and adults.
- Provided all daily living tasks to enhance quality of life for elderly patients.
- Ensured HIPAA compliance.

09/1995 to 07/1998 **Nursing Instructor**
Borough of Manhattan Community College, New York, NY

- Initiated, facilitated, and moderated classroom discussions.
- Prepared and delivered lectures to undergraduate students on topics such as pharmacology, mental health nursing, and community health care practices.
- Kept abreast of developments in the field by reading current literature, talking with colleagues, and participating in professional conferences.
- Prepared course materials such as syllabi, homework assignments, and handouts.
- Supervised students' laboratory and clinical work.
- Evaluated and graded students' class work, laboratory and clinic work, assignments, and papers.

02/1988 to 6/1993 **Staff Nurse**
Flushing Hospital, Flushing, NY

- Conducted chronic patient care in med-surgical unit, adeptly handling all aspects of treatment from medication to wound-care to monitoring the number patients per shift.

- Did primary care, assessment, and evaluation of neonatal and pediatric patients.
- Ensured efficacy of treatments through monitoring of treatment regimens.
- Followed infection control procedures.
- Assisted patients with daily functions.
- Developed patient-care plans, including assessments, evaluations, and nursing diagnoses.
- Provided all daily living tasks to enhance quality of life for elderly patients.
- Assisted residents with bathing, dressing, feeding, lifting and transferring.
- Demonstrated strong leadership for nursing personnel assigned to the unit/shift.
- Ensured HIPAA compliance.
- Assessed need for, ordered, obtained, and interpreted appropriate lab tests.
- Did pharmacological and non-pharmacological management.
- Did treatment of various disorders and diseases.

ACCOMPLISHMENTS AND PROFESSIONAL AFFILIATIONS:

- Dean's List throughout program of study
- Member of American Nurses' Association