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# Testing the Efficacy of a Brief Psychoeducational Video On Improving Mental Health Literacy

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# TESTING THE EFFICACY OF A BRIEF PSYCHOEDUCATIONAL VIDEO ON IMPROVING MENTAL HEALTH LITERACY

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**Dissertation Approval**

This is to certify that the thesis presented to us by Gregory Anastasio

on the 10th day of May, 20 15, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

**Committee Members' Signatures:**

**Chairperson**

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## Abstract

Mental health literacy (MHL) is defined as knowledge and beliefs about mental health disorders which aid in recognition, management, or prevention (Jorm et al., 1997). The concept of MHL is essential in helping individuals understand and recognize symptoms of mental health disorders. In addition, MHL encompasses components related to stigma and attitudes that serve to facilitate or inhibit help seeking behaviors. Although the public has benefited greatly from initiatives aimed at improving knowledge about physical disease, similar initiatives aimed at improving MHL have been comparatively neglected. Many members of the public have difficulty recognizing specific types of psychological distress (Jorm, 2000). Yet, limited interventions aimed at improving MHL have been evaluated and assessed. Enhancement of MHL can lead to a greater likelihood of treatment engagement and successful outcome. The purpose of this study is to introduce the concept of MHL to a wider audience and identifying possible brief psychoeducational interventions that can improve the public's knowledge about mental health. It was hypothesized that a brief psychoeducational video about depression would be an effective strategy that increases MHL as it relates to knowledge about depression, stigma towards depression, and attitudes towards seeking professional psychological help. Participants were randomly assigned to watch either a video about depression or a video about nutrition. After viewing their respective videos, participants in both conditions were asked to complete scales that measured their depression literacy, stigma towards depression, and attitudes towards seeking professional psychological help. Participants demonstrated similar levels of depression literacy, stigma towards depression, and attitudes towards seeking professional psychological help, regardless of their assigned condition. However, this study found that individuals who have had previous mental health treatment tended to have more positive attitudes towards seeking

professional psychological care. This finding suggests the possibility that a healthy interaction with a mental health professional can enhance attitudes towards mental health and increase the likelihood of future treatment engagement.

Table of Contents

List of Tables

# Chapter 1: Introduction

## Statement of the problem

Health Literacy is defined as "the ability to gain access to, understand, and use information in ways which promote and maintain good health" (Nutbeam et al., 1993). Health literacy has provided the public with a plethora of information related to dieting, cancer, breast examinations, and crisis interventions, to name a few (Jorm, et al., 2000). Mental Health Literacy (MHL) is a construct that has arisen from the domain of health literacy (Kutcher et al., 2016). Jorm et al. (1997) introduced the term "Mental Health Literacy" and defined it as an individual's "knowledge and beliefs about mental disorders, which aid in recognition, management, or prevention."

Furthermore, MHL encompasses several additional components including: (a) ability to recognize specific disorders or different types of psychological distress; (b) knowledge and beliefs about risk factors and causes; (c) knowledge and beliefs about self-help interventions; (d) knowledge and beliefs about the availability of professional help; (e) attitudes which facilitate recognition and appropriate help-seeking behavior; and (f) knowledge of how to seek mental health information (Ganasen et al., 2008).

Many individuals in the public cannot correctly identify a mental health disorder, and this may hinder their ability to accurately convey how they are feeling to a treatment professional. Research that examined the prevalence of mental health disorders in the United States found that 46.6 percent of Americans reported meeting criteria for an anxiety disorder, mood disorder, impulse control disorder, or a substance abuse disorder (Kessler et al., 2005). In addition, half of all lifetime cases of mental illness begin by age 14 and 75 percent begin by age 24 (Kessler et al., 2005).

Despite the prevalence of mental health disorders, many members of the public do not understand the meaning of psychiatric labels and terms (Jorm et al., 2000). When people do not use appropriate labels of mental disorders such as depression or anxiety, they are likely to use normalizing terms such as stress or phase of life, which may delay their seeking professional help (Jorm, 2012). Considering the number of people who experience mental health disorders, it is extremely important that symptoms are reported accurately and that individuals are able to identify potential mental health issues as they arise.

The disparity of knowledge and information as it pertains to MHL may be magnified among people with low Socioeconomic Status (SES). People living in socioeconomically disadvantaged communities are particularly vulnerable to mental health issues due to poor conditions of living, violence, and the chronicity of stress (Chow, Jaffee, & Snowden, 2003). People of low SES generally have poorer health status, have a higher mortality rate than high SES groups, and have a higher incidence rate for all types of cancer (Louwman et al., 2010). In addition, low SES groups face many barriers when it comes to accessing treatment.

In this regard, a person's likelihood of engaging in treatment can sometimes depend on the information and knowledge that is made available to them. Unfortunately, SES seems to impact the amount or type of information people receive regarding their healthcare. In one study, researchers found that women with low SES and low educational attainment were less likely to have their physicians recommend a mammogram (Louwman et al., 2010). On the other hand, researchers found that the women who had greater SES and higher educational attainment were more likely to receive a recommendation for a mammogram from their physician. (Louwman et al., 2010).

Prior research posited that higher levels of income and education, has led to a greater involvement in the healthcare system, thus resulting in an increased likelihood of receiving appropriate and adequate care (e.g., Louwman et al., 2010). In regard to mental health, poor geographic areas with a high proportion of minority residents generally lack the resources needed to maintain community mental health services (Chow et al., 2002). Low SES groups that do not have the opportunity to interface with mental health providers may be at risk for worsening symptoms and in severe cases, experience fatal consequences.

Unfortunately, many individuals in the general public are uninformed about what they can do to prevent mental health disorders for themselves and others, which may delay treatment engagement (Jorm et al., 2012). On the contrary, researchers have determined that health literacy education for disadvantaged populations has been shown to improve a person's willingness to seek and adhere to treatment for medical diagnoses (Schillinger, et al., 2002). In fact, among low SES adults with HIV infection, health literacy plays a crucial role in the daily maintenance of the disease (Tique et al., 2016.) Researchers have found that HIV positive individuals with high levels of health literacy were more likely to take appropriate medication and regularly attend follow up appointments (Tique et al., 2016). Initiatives aimed at improving health literacy and educating underserved groups are actively advancing health equity; however, similar initiatives aimed at improving MHL have been comparatively neglected. Furthermore, the effort in dealing with mental health disorders is not commensurate with the burden of the disease (Jorm et al., 2012).

**Statement of the Problem:** The concept of Mental Health Literacy continues to be secondary to health literacy and public information about physical disease. Additionally, individuals living in poor neighborhoods and those with low socioeconomic status are at a clear disadvantage when it comes to accessing information about mental health. Conventional wisdom tells us (and researchers agree) that possessing accurate knowledge about mental health symptoms is the first step towards help-seeking behavior. However, many people are uninformed about ways to identify mental health symptoms and lack necessary skills and knowledge when it comes to accessing help. An even greater disadvantage is the fact that groups with low levels of MHL are at a loss during times of crises for themselves and their loved ones. Last, there are insufficient interventions aimed at improving Mental Health Literacy.

**Purpose of Study:** The purpose of the study is to investigate the efficacy of a brief psychoeducational intervention targeted at improving mental health literacy, specifically as it relates to depression. Furthermore, this study examined potential barriers that exist in low socioeconomic communities, relative to the dissemination and understanding of mental health information. Last, this study utilized a brief, time limited intervention aimed at improving a person's knowledge about depression, reducing stigma towards depression, and improving attitudes towards seeking professional psychological help. The development and success of such brief interventions has important implications for reaching a large portion of the population and beginning to address the mental health literacy deficit.

# Chapter 2: Literature Review

## The Concept of Mental Health Literacy

Mental Health Literacy is not as simple as having knowledge about mental health. Rather, MHL involves set of multifaceted variables that tend to benefit one's own mental health (Jorm et al., 2012). The degree to which a person will seek treatment for him or herself or someone else can be largely influenced by his or her knowledge, attitudes, and beliefs about mental health. Additionally, symptom management skills are largely a reflection of an individual's MHL (Jorm, 2000). Individuals may be more likely to engage in healthy behaviors when they have knowledge about appropriate self-help skills. Furthermore, a person may be more inclined to engage in appropriate treatment if he or she is aware, educated, and knowledgeable about such resources.

### *Recognition of Specific Disorders or Different Types of Psychological Distress*

The recognition of mental health symptoms is an important component of MHL. The longer it takes a person to recognize a mental health disorder, the longer it will take him or her to receive appropriate care. Although symptom recognition is paramount to prognosis, many people have difficulty recognizing mental health symptoms, which can significantly delay treatment. Research shows that the sociodemographic group at the greatest risk of suicide are the least likely to recognize depression (Klineberg, et al., 2011).

An Australian study examined people who sought treatment for mood disorders and found that there was an average delay of 8.2 years when it came to treatment engagement (Thompson et al., 2008). In addition, it took about 6.9 years to recognize the presence of symptoms, but there was only a 1.3-year gap between symptom recognition and help-seeking

(Thompson et al., 2008). In essence, the recognition of symptoms appeared to generate appropriate help-seeking behaviors.

There is a clear link between symptom recognition and help seeking behaviors for both physical and mental health issues. However, mental health conditions may be difficult to recognize due to the variety symptoms that may present for any one disorder, making the need for MHL even more critical. In one study by Jorm et al., (1997), he provided participants with vignettes of people with mental health symptoms and asked them to identify the disorder correctly. This study found that only 39% of participants were able to label the depression vignette, and only 27% correctly identified schizophrenia. When individuals have difficulty identifying symptoms, this negatively impacts treatment engagement and help seeking behaviors.

In addition to identifying symptoms of mental health disorders accurately, it may also be important to use proper terminology when describing symptoms. In one study, people who labeled a scenario of a depressive episode with a label other than depression were more likely to deal with the issue on their own depression as opposed to seeking help (Jorm, Kelly et al., 2006). In a sense, accurate recognition of mental health symptoms and even appropriate use of terminology are crucial factors that lead to enhanced treatment engagement.

*Knowledge and Beliefs Regarding Interventions for Mental Health Disorders*

Relative to physical diseases, it is widely accepted that people can benefit from having knowledge about preventative measures and treatment options (Jorm, 2012). However, when it comes to available treatment strategies for mental health disorders, the public tends to have negative beliefs about potentially viable treatment options. For example, the public typically has skewed beliefs regarding the use of psychotropic medication, including potential, perceived side effects such as brain damage, dependence, and lethargy (Jorm et al., 2000). This finding has

major implications as it relates to treatment adherence, because attitudes and beliefs about antidepressant medications typically predict antidepressant adherence (Jorm et al., 2000).

In terms of mental health treatment, patient expectations or personal beliefs about treatment also appear to be powerful predictors for treatment success. In one study, researchers found that patient expectations of improvement predicted the probability of symptom reduction (Sotsky et al., 1991). Positive patient expectations of therapy can foster an active engagement in therapy, which can lead to a positive health outcome (Meyer et al., 2002).

In addition to beliefs and perceptions about mental health interventions, some individuals are simply uniformed, or lack knowledge related to specific treatments. However, through education, individuals can also learn more about mental health conditions and potentially useful treatment options. In a recent pilot study, researchers found that a pharmacist-led medication education group was an effective approach in helping people have a better understanding of the purpose of medicine and the potential side effects, and participants tended to feel more actively involved in their medical decisions (White et al, 2017). The more information a person has about viable treatment options, the more likely he or she is to recognize its potential effectiveness, which can directly influence the outcome of treatment.

### *Knowledge and Beliefs About Self-Help Interventions*

MHL also encompasses components of self-help and takes into account an individual's ability to effectively manage his or her own symptoms (Jorm, 2000). In this context, self-help is an important factor as it pertains to symptom management, specifically in populations that historically had to create their own strategies to survive in the absence of professional help. Accordingly, MHL extends far beyond a measurement of knowledge and includes a person's ability to be an active agent in his or her own mental health care. This is an important perspective

because it speaks to the value of increasing public (and professional) knowledge and skills regarding mental health (Jorm, 2000).

Self-help is an important tool when it comes to managing mental health symptoms. Some self-help skills include talking with family members, exercising, or reading. In some cases, research has demonstrated that the onset of a major depressive episode can be deterred through preventative interventions (Van Zoonen et al., 2014). In other studies, self-help interventions have been shown to reduce depression, panic disorder, phobias, and anxiety disorders (Cuijpers, 1997; Gregory et al.. 2004; Hirai & Clum, 2006). In a sense, self–help interventions can be used to prevent and even manage mental health conditions more effectively.

However, it is equally important to recognize when professional help is necessary. In one study, desire to handle one's own problem was the most common barrier to help seeking behaviors (Andrade et al., 2004). In terms of MHL, it is vital that a person has the ability to ask for and receive treatment when self-help becomes an ineffective option.

*Attitudes Which Facilitate Recognition and Appropriate Help-Seeking*

Although MHL is concerned with a person's ability to practice self-care, it is equally concerned with a person's ability to engage and access mental health treatment. In some cases, an individual's willingness to engage in treatment hinges on personal beliefs and attitudes. In one study with adolescent participants, researchers found that extreme self-reliance, that is, solving problems on one's own all the time, was associated with reduced help-seeking, clinically depressive symptoms, and serious suicidal ideation at baseline (Labouliere et al., 2015).

Although self-reliance skills are important, they can disrupt an individual's ability or willingness to engage in mental health treatment with a professional. In this regard, MHL is concerned with the attitudes and stigmatizing beliefs that may provoke destructive self-reliance

and inhibit help seeking behaviors. In one study, the researchers found that adolescents who valued extreme self-reliance also experienced a sort of "self-stigma," wherein their attitudes about seeking professional help prevented them from appropriately disclosing their symptoms or engaging in treatment even in the face of seriously elevated mental health symptoms (Labouliere et al., 2015). Research shows that psychoeducational interventions are effective strategies that can be used to dissolve attitudinal barriers. In one study, researchers found improvements in participants' willingness to speak with a counselor or psychiatrist when they were provided with a talk about help-seeking, depression, professional help, and drug use (Kelly et al., 2007). Given these findings, it is crucial that MHL initiatives aim to modify attitudinal barriers that reinforce extreme self-reliance (Labouliere et al., 2015) and address stigmatizing beliefs that inhibit or dissuade treatment.

*Knowledge of How to Seek Mental Health Information*

Many people experience deficits in knowledge when it comes to accessing mental health information and care. In fact, many people remain uninformed about insurance coverage and may even be skeptical about the effectiveness of mental health treatment (Eisenberg, Golberstein, & Gollust 2007). When there is uncertainty about how to access mental health care, people are less likely to receive adequate treatment. In addition, people remain uneducated about the roles of different health professionals. In one study, researchers found that 83% of the public perceived the general practitioner to be the most helpful in managing depression when compared with the help of psychologists and psychiatrists (Jorm et al, 1997a). Researchers also noted that only 51% of the general public believed that a psychiatrist would be helpful for depression, and only 49% of the general public viewed psychologists as helpful (Jorm et al., 1997).In this regard, many people have difficulty successfully accessing mental health treatment. In fact, recent

research that examined the barriers to initial help-seeking factors in depression and anxiety found that the most frequently endorsed reasons for delayed treatment relate to a lack of knowledge about mental health and a lack of understanding regarding the resources that are available (Thompson, et al., 2004).

In addition to deficits in knowledge about how to seek mental health treatment, people may also have attitudinal barriers that can greatly influence help seeking behaviors. For example, people may be less inclined to engage in help seeking behaviors if they do not perceive themselves as needing help. Research shows that individuals with a low perceived need for treatment tend not to ask for help (Mojtabai et al., 2011). Both a lack of knowledge about how to access mental health care and a lack of perceived need for treatment are two major barriers to seeking mental health information and accessing appropriate care.

**Mental Health Literacy in Low SES Communities**

A meta-analysis found that minority status, low education, and low SES have been linked to high dropout rates in mental health therapy (Wierzbicki & Pekarik, 1993). Furthermore, low-income neighborhoods are at a distinct disadvantage when it comes to accessing mental health care. Poor access to mental health treatment may increase the likelihood of disease morbidity and complex medical issues. Unfortunately, areas of economic deprivation have the greatest need for mental health services, but the lowest access to it (Saxena et al., 2007).

Socioeconomic status is unquestionably linked to the amount of mental health information a person has access to. In part, low-income groups may experience barriers related to accessing information and acquiring knowledge related to mental health due to unequal resources, corroded education, and an overall lack of action and advocacy by leaders within the

health field. In general, people from low SES communities tend to know less about depression, schizophrenia, and eating disorders (Von dem Knesebeck et al.,2013).

Poverty is more than just having low-income; it further encompasses non-monetary aspects such as social vulnerability, social exclusion, and denial of opportunities and choice (Saxena et al., 2007). In this regard, vulnerable populations are at a distinct disadvantage when communicating with providers due to the complex interplay between health literacy, resource limitations, and psychosocial factors (White et al., 2016). The complexity of psychosocial barriers faced by low SES groups also influences how they access appropriate treatment.

In one study, 71% of respondents reported that they initially met with a general medical practitioner for their mental health problems (Thompson et al., 2004). However, many health professionals may be unprepared to manage the complex social, psychological and psychiatric needs in their communities (Yuen, Gerdes, & Gonzales, 1996). When presented with psychologically based symptoms, general practitioners correctly diagnosed an anxiety disorder 93% of the time. However, when the same disorders were presented with somatization symptoms, practitioners correctly diagnosed only 23% of the time (Herrán, et al., 1999). This poses a significant problem because some studies recognize that morbidity exists between depression, anxiety, and somatization 50% of the time when presented at a primary care office (Löwe et al., 2008). An increase in public education about mental health disorders may enhance a person's ability to describe his or her symptoms effectively to general practitioners, which can increase the likelihood of an accurate diagnosis, and positive health outcome.

When compared with those in high SES groups, low SES groups are less likely to adhere to treatment regimens, learn and understand how to protect their health, seek preventative care (even when it is a free service), and practice healthy behaviors that prevent illness (Gottfredson,

2004). National public education campaigns that utilize local interventions based on direct social contact with people might be an effective strategy in increasing the likelihood of treatment engagement (Saxena et al., 2007).

In the same way that low SES influences knowledge about mental health symptoms, low SES also influences expectations, attitudes, and beliefs about the etiology of mental health disorders. In one study, individuals with low SES and low educational attainment were more likely to attribute depression, schizophrenia, and eating disorders to having a weak will (Von dem Knesebeck et al., 2013).

In addition, SES groups hold differing beliefs pertaining to preferential treatment options. In some cases, treatment considerations may be hinged on perceived etiology. For example, individuals who recognize a biological basis for depression may be more inclined to use psychotropic medication. In one study, researchers found that high SES individuals are more likely to consider medication as an effective option for treating depression and schizophrenia (Von dem Knesebeck et al., 2013).

Socioeconomic status creates subtle but powerful differences in treatment engagement, beliefs regarding the cause of symptoms, and the course of action any given person may take. A recent study in 2015 found that individuals with high SES were more likely to engage in individual outpatient therapy for Post-Traumatic Stress Disorder (PTSD) (Sripada et al., 2015). Additionally, the high SES group was more likely to engage in long-term psychotherapy (Sripada et al., 2015). In congruence, young people with low SES and low educational attainment, tend to share negative beliefs regarding mental health services (Jagdeo, et al., 2009).

The concept of MHL, especially when interacting with low SES, may contribute to a person's ability or willingness to seek appropriate treatment. Individuals of low SES may be at

risk for deficits in MHL (i.e., lack of understanding or recognition of symptoms) that impede help-seeking. Further, a person's level MHL may also influence their interaction style during primary care contact, collaborative efforts made within treatment, and an individual's ability to adhere to treatment protocol. As a result, interventions should aim to improve the public's attitudes towards mental health services. Furthermore, steps should be taken to educate disadvantaged groups about the etiology of mental health disorders while striving to enhance their ability to recognize symptoms and access appropriate treatment.

**Barriers to Utilization of Mental Health Services in Low Socioeconomic Groups**

Although the utilization of mental health services in low SES communities is less than that of high SES communities, empirically-based therapy interventions are shown to be effective for both (Santiago, Kaltman, & Miranda, 2013). Engagement and participation in clinical services with low-income adults can be increased by educational strategies (Santiago et al., 2013). The need for education and information is a key factor in improving MHL in underserved and disadvantaged groups. However, researchers report that mental health clinics in poor areas may lack resources needed to maintain a functional clinic (Chow et al., 2013). Thus, even when people can access services in their communities, the utility of those services may be hindered by the fact that many mental health clinics lack resources to operate effectively.

The aforementioned variables shed light on the reality-driven barriers that prevent individuals living in poverty from acquiring adequate mental health treatment. On a similar note, perceptions and beliefs held by individuals living in low SES communities may also serve as barriers to attaining treatment. For example, a recent research article found that individuals with low SES are twice as likely as individuals with high SES to visit the emergency room (Kangovi et al., 2013).

An in-depth analysis of interviews done in the community found that individuals with low SES perceive a hospital visit as less expensive, more accessible, and of higher quality of care than outpatient services (Kangovi el al., 2013). Not only do these perceptions drive low SES consumers away from receiving appropriate mental health care, they also perpetuate and exacerbate health disparities (Kangovi et al., 2013). Even more, Low-SES patients describe discharge goals that are unrealistic in the face of significant socioeconomic constraints (Kangovi et al., 2013). In a sense, attitudes, beliefs, and incongruous resources tend to impact mental health utilization negatively in low SES groups.

Negative perceptions and stigmatization also tend to create a divide between the need for services and utilization in low SES groups. Recent research demonstrated that low income individuals and ethnic minorities are far less likely to seek mental health services due to historical trends of racism in medical settings (Santiago et al., 2013). Some historical trends of racism may manifest subtly; for example, example, in one landmark study, researchers found that minority patients were discharged more quickly and were more likely to be seen for informal, minimal supportive therapy as opposed to regular individual therapy (Sue, 1976).

Furthermore, some low SES adults may share a common fear of losing custody of their children, which prevents their use of services (Santiago et al., 2013). The perceptual scenario of losing custody of a child typically outweighs the desire to receive services, and as such, serves as a barrier for low income parents when seeking mental health treatment for their children or even for themselves. A similar line of research suggests that individuals in low SES communities fear that confidentiality will be broken, thus leaving them vulnerable (Canvin et al., 2007). However, through education, the limits of confidentiality can be expressed, emphasized, and expanded so that vulnerable groups are able to feel safe when using mental health services.

The link between poor mental health and low SES is a function of cycles of adversity, stress, and a reduced capacity to cope (Sareen, et al., 2011). Research has indicated that poverty and low SES are negatively associated with mental health outcomes (e.g., Olfson et al., 2009). In some cases, individuals with low SES may experience barriers that preclude them from seeking and receiving quality treatment.

The negative outcomes in mental health treatment can be attributed to several factors including poverty, stress, or even a lack of knowledge about how to engage successfully in treatment. Recent research shows that 87% of children living in poverty have unmet mental health needs (Santiago et al., 2013). The unmet mental health needs of children tend to stem from factors such as chronic stress, living in disadvantaged neighborhoods, and social isolation (Santiago et al., 2013).

There may also be logistical barriers that impede an individual's ability to seek or acquire treatment. For example, having dependable transportation has been a known issue for people seeking treatment at community mental health centers in disadvantaged neighborhoods. Researchers found that public transportation was an independent predictor of not having regular medical care, whereas low SES individuals who had private rides were more likely to engage in treatment on a regular basis (Sareen, et al., 2011). In addition, the same research study found that low SES children missed about 52% of appointments, which parents attributed to transportation barriers (Sareen et al., 2011). Transportation is one of many barriers that influence the use and engagement of mental health therapy in the low SES communities.

A few additional institutional barriers include affordability and unfamiliarity with accessing treatment (Davis et al., 2008). As it relates to affordability, level of income may be a contributing factor that influences help seeking behaviors. Researchers found that those

individuals who made less money reported foregoing mental health care more often because of the cost (Mojtabai, 2005). A recent research study that looked at low income individuals who met diagnostic criteria for Post-Traumatic Stress Disorder (PTSD) found that institutional barriers played a role in service engagement (Davis et al., 2008). In some cases, people may feel intimidated by institutional procedures (Davis et al., 2008), which can diminish help seeking behaviors.

One major institutional procedure is obtaining health insurance. The National Comorbidity Study found that 47 percent of respondents with mood disorders, anxiety or substance abuse disorders who identified a need for mental health treatment, cited cost or not having adequate health insurance as main reasons for not seeking treatment (Rowan et al., 2013). Although the intentions of each income group were similar, the engagement in services was negated by affordability and access to care. The aforementioned barriers continue to serve as obstacles to seeking and acquiring appropriate mental health services for low SES groups. Although low SES groups are at a particular disadvantage as it relates to MHL, inadequate MHL is a ubiquitous problem in a majority of other groups, including those in high SES groups. In a sense, even when some groups have acceptable resources and education, low MHL continues to be a pervasive variable that influences treatment and health outcomes.

**Depression Literacy**

Mental health literacy helps patients recognize, cope with, and prevent psychological distress. Depression literacy refers to an individual's ability to recognize depression and make informed choices about treatments for depression. (Deen & Bridges, 2011). The concept of depression literacy is of great importance because the incidence of depression is active and ever present amongst the general public. Furthermore, rates of depression literacy are known to vary

amongst the population. For example, there is evidence that men have lower levels of depression literacy, compared with women (Deen & Brides, 2011).

By 2020, depression is expected to rank 3rd on the global burden of disease (Pescosolido et al., 2010). Accordingly, the least well off or those living in low SES conditions tend to suffer a disproportionate share of the burden of disease, specifically depression (Everson et al., 2002). Living in disadvantaged neighborhoods puts people at a greater risk for experiencing chronic stress, which may increase the occurrence of depression. Despite the chronicity of adverse experiences, there still tends to be a disengagement and lack of help seeking behaviors from individuals experiencing depression.

One potential barrier to treatment engagement may stem from low levels of depression literacy. Specifically, a lack of knowledge in regard to the etiology of depression can influence treatment outcome. In one study, although 75 percent of participants were able to diagnose a depressive disorder correctly when presented with a vignette, 43 percent of participants considered that the episode of depression was due to weakness in character. In general, the public's understanding of the causes and origins of depression tend to be skewed by factors such as stigma and lack of basic information (Wang et al., 2007).

The misperception and misinformation about depression can create a divide between the need for treatment and overall treatment engagement. In fact, higher levels of depression literacy have been associated with appropriate help seeking behaviors (Batterham et al., 2013). Psychoeducation that is aimed at improving depression literacy can have major implications for boosting knowledge and breaking down misconceptions, which can lead to enhanced treatment engagement and better health outcomes.

As discussed, the perceived etiology and beliefs about depression can influence which type of treatment a person might engage in. For example, a recent study highlighted the fact that a common misperception related to depression is that it is caused by non-biological factors such as stress or family conflict (Jacob et al., 2015). Additionally, many individuals in the public believe that antidepressants are addictive (Jacob et al., 2015). Some individuals also believe that they can take fewer antidepressants when they feel better and use more antidepressants when they feel worse (Jacob et al, 2015). Inaccurate information regarding treatment options and misperceptions about the etiology of depression can have a pronounced influence on help seeking behaviors and treatment engagement. Depression is represented by a myriad of symptoms that can encompass both psychological and physical symptoms. For example, loss of pleasure and interest are common staples of depression; however, some individual's may experience disturbed sleep, lack of appetite, or decreased concentration. The diversity of symptom presentation can make it difficult for the general public to recognize symptoms of depression. Furthermore, depression is characterized by a strong recurrence that tends to linger in a person's life. During the first year of recovery from depression, 21%-34% of people will experience a second episode of depression. Also, the recurrence percentage increases to 85 percent after 15 years (Hardeveld et al., 2010).

In order to avoid recurrence, it is essential that individuals follow their prescribed treatment regimen. However, as previously mentioned, misconceptions about antidepressants continue to drive non-adherence. In one study, 30% of patients stopped taking their antidepressants within 30 days, and 40% stopped within 3 months (Olfsen et al., 2009). Even when individuals are able to recognize mental health disorders such as depression, there tends to be an uncertainty about effective treatment strategies and solutions. In some cases, researchers

have found that many participants thought that dealing with the problem on their own was the most effective strategy in managing depression (Addington, 2007).

In congruence with the literature, barriers that continue to limit people from engaging in psychotherapy for depression are factors such as difficulty contacting a provider, lack of knowledge about how to seek help, and overall low depression literacy. Improvement of depression literacy can greatly increase the likelihood that individuals will access appropriate health care. Even more, interventions aimed at improving depression literacy can lead to positive health outcomes. In some cases, depression literacy interventions have also been known to reduce symptoms of depression. Christensen, Griffiths, & Jorm (2004) found that both cognitive behavioral therapy and psychoeducation that was delivered via the internet were effective interventions that reduced symptoms of depression. Not only are depression literacy interventions helpful in improving symptoms of depression, but they are also effective strategies for improving a patient understating of evidenced based treatment options for depression (Christensen, Griffiths, & Jorm, 2004).

**Stigma**

Stigma can be defined as a set of "negative attitudes, beliefs, or thoughts, that influence the individual, or general public, to fear, reject, avoid, or be prejudiced, and discriminate" against those with mental health disorders (Gary, 2005a, p. 980). There have been several studies suggesting that stigma is the leading cause of concern for people with depression (Mcnair et al., 2002). In addition, research shows that the underutilization of mental health services can be largely attributed to stigma (Corrigan, 2004).

In fact, some members of the public may be reluctant to disclose a mental health condition to their employers for fear of adverse consequences on their job security. A MHL

survey conducted by Jorm et al. (2000) showed that Americans were unwilling to seek mental health treatment because they feared negative impact at their place of employment. As mental health misperceptions and stigmatization persist, the utilization of mental health services will continue to decline.

The construct of stigma has also been used to explain the reason why disadvantaged groups may underuse mental health services (Gary, 2005). A recent qualitative study examined 25 individuals living in adverse conditions and receiving welfare benefits and found that the participants viewed mental health services with distrust and even as a potential risk to their well-being (Canvin et al., 2007). The source of mistrust appears to stem from the stigma associated with mental health treatment and concerns about being misunderstood and/or harshly judged (Canvin et al., 2007).

Research shows that negative beliefs, attitudes, and social norms predict a low perceived need for treatment (Van Voorhees et al., 2006). A recent survey that examined the reason why some minorities may not seek treatment for a major depressive episode found that the majority of respondents feared being hospitalized (Pescosolido & Boyer, 2010). Erroneous beliefs or misunderstandings about mental health treatment that serve to bolster stigmatization can be major deterrents to treatment engagement.

Research done by Corrigan (2004) found that adolescents who were more likely to endorse stigma were less likely to engage in treatment. Conversely, stigma tends to be a less relevant factor when adolescents believed that treatment was likely to be successful (Corrigan, 2004). In this case, helping individuals understand potentially effective treatment options may be a way to increase the public's knowledge about mental health services and treatments. In

addition, educational interventions can be used to inform effectively and, in some cases, challenge the public's beliefs about mental health disorders and viable interventions.

As discussed, stigma is a multifaceted concept that can serve as a deterrent for engagement in mental health treatment. Many individuals may feel reluctant to seek mental health treatment because of the stigma that is associated with mental health disorders (Jennings et al., 2015). The concept of stigma is not one dimensional; rather, it entails components of perceived stigma and self-stigma. Both perceived stigma and self-stigma are contributing factors related to a person's likelihood to engage in mental health care. In one study, researchers found that higher levels of perceived stigma, self-stigma, and self-reliance were related to a more negative attitude towards seeking treatment (Jennings et al., 2015). In addition, researchers found a 3-path mediation model which suggests that higher perceived stigma was related to higher self-stigma; higher self-stigma was related to higher self-reliance, and higher self-reliance was associated with a more negative attitude towards seeking treatment (Jennings et al., 2015).

Stigma associated with mental illness is an important contributing factor that reduces help seeking (Clement et al., 2015). In many cases the duration of untreated mental illness is associated with worse outcomes for psychosis, bipolar disorder, and major depressive and anxiety disorders (Boonstra et al., 2012; Dell'Osso et al., 2013). In one study, researchers demonstrated an association between stigma and help-seeking because internalized stigma and treatment stigma are most often associated with reduced help seeking (Clement et al., 2015). When individuals delay mental health care, the consequences can be dire. The research highlights the fact that stigma is a complex and multidimensional concept that is influenced by perceptions and beliefs, all of which impact treatment engagement.

Examining MHL in conjunction with stigma is useful because the negative stereotypes inherent in stigma involve distortions of knowledge and understanding (Holman, 2015). Link and Phelan identified a three-stage model of stigma. Initially, the person is 'marked' as different, then associated with undesirable characteristics, and subsequently rejected and avoided (2010).

Corrigan and Watson, divided stigma into stereotypes (negative beliefs about a group), prejudice (agreement with belief and/or an emotional reaction to it) and discrimination (behavioral response to this agreement/reaction) (2002). In any manner, stigma is a complex force that interacts with treatment engagement and outcome. In this respect, researchers identified a number of different ways that stigma interferes with help seeking. For example, research defined anticipated stigma (anticipation of personally being perceived or treated unfairly); experienced stigma (personal experience of being perceived or treated unfairly); internalized stigma (holding stigmatizing views about oneself); perceived stigma (views about the extent to which others have negative attitudes or beliefs about those with mental health illness); stigma endorsement (participants own stigmatizing attitudes towards other people with mental illness); and last, treatment stigma (stigma associated with seeking or receiving treatment for mental illness) (Clement et al.,2015). Given these findings, stigma is an appropriate target for MHL interventions aimed and improving treatment adherence and help seeking behaviors (Sirley et al., 2001).

Stigma also decreases the level of empathy and understanding that a person has for someone with a mental illness. People who suffer from more serious types of mental health disorders such as schizophrenia remain highly stigmatized (Link & Phelan, 2013). Surveys conducted by the National Alliance for the Mental Ill (NAMI) have demonstrated that many

people believe those with mental illnesses are dangerous and unpredictable, can never be normal, cannot engage in conversation, and do not make good employees (Link & Phelan, 2013).

Another study which surveyed U.S. citizens found that 70 percent of respondents would not want someone with a mental illness to marry into their families; yet another study suggested that 19 percent of respondents would not be comfortable around someone with a mental illness (Scheyett, 2005, p. 86). In many cases, fear, rejection, or avoidance of people with mental illness is an unfortunate reality. However, through education, many stigmatizing beliefs can be mitigated and the acceptance of those with mental illness can be improved.

**Primary Care Mental Health Integration**

The primary care sector remains the most common site for the delivery of depression care, specifically for African Americans and Hispanics (Cooper et al., 2003). As previously mentioned, potential barriers to treatment engagement include stigma, beliefs about depression, and knowledge of how to obtain appropriate services.

A 2006 study concluded that many people reported that they would feel embarrassed about seeking help from mental health professionals (Barney et al., 2006). Furthermore, some participants in the study expected professionals to respond negatively to them (Barney et al., 2006). As previously mentioned, one study showed that 71% of respondents initially addressed mental health problems with their primary care provider. For this reason, the primary care setting has important implications for the future of psychological care. Recent research found that primary care mental health integration; that is, having a mental health professional available in primary care settings, potentially preserves resources, increases continuity of care, and increases treatment access for veterans (Brawer et al., 2011).

The presence of primary care mental health integration programs increases access to mental health care, including both psychotherapy and psychiatric medication management (Davis et al., 2016). In terms of MHL, the primary care setting can potentially serve as a forum for mental health education, regardless of the reason for the initial visit. Psychologists are in the unique position to provide education about services, treatments, and manage appropriate referrals for both providers and patients. Previous research focusing on classroom education found that the use of brief, classroom based mental health education was a favorable method to modify help-seeking attitudes and negative opinions of the mentally ill (Sharp et al., 2006). The use of short-term interventions lends itself to the primary care setting because treatment is typically brief and time limited. Resources that utilize media, such as advertising campaigns or even office posters, can broaden the range of services in which a person might be interested (Glascoe et al., 1998). The primary care setting offers a destigmatizing environment for treatment and for mental health education. As such, psychologists should continue to broaden their scope of practice in the primary care setting and incorporate educational resources pertaining to mental health symptoms and available treatment options.

**Caregiver Mental Health Literacy**

As previously discussed, MHL refers to mental health knowledge and beliefs that aid in recognition, management, or prevention of mental illness (Jorm et al., 2007). In this regard, MHL is concerned with both the prevention and the maintenance of mental health disorders. For this reason, it is extremely important that caregivers to those individuals with mental health disorders are equipped to manage such conditions. In fact, recent research shows that improvement of caregiver MHL can lead to enhanced outcomes for children with mental health symptoms. (Mendenhall & Frauenholtz, 2015).

Specifically, caregivers are in a unique position to serve as catalysts for treatment engagement. Even more, caregiver knowledge about mental health disorders and available treatment options can be predictive of treatment success. A study of parents who already had their children enrolled in mental health services found that increased parental knowledge about treatment was positively correlated with quality of service utilization (Mendenhall, Frista, & Early, 2009). In this regard, it is essential that a rationale for the course of treatment is discussed with patients, parents, or caregivers. If both parents and patients have a better understanding of treatment options, they may be more likely to engage in appropriate care.

In 2009, researchers found that approximately 13% of children in the USA had a mental health disorder (Merikangas et al., 2010). Despite this finding, people still have limited knowledge about MHL and children's mental health (Pescosolido et al., 2008).Therefore, it is particularly important that parents are able to effectively recognize psychological distress and the occurrence of mental health disorders. Jorm et al. (2006) have observed that accurate identification of mental health problems is associated with better treatment decisions.

Relative to parents and caregivers, parents with more knowledge about mood disorders utilize more services and access services of greater quality (Mendenhall 2011). Children and adolescents also identify their parents as primary sources of support for managing their mental health disorders (Jorm & Wright, 2007). Knowledge about mental health disorders is essential for parents and caregivers because it typically informs treatment and engagement with mental health services.

**The Impact of Low Mental Health Literacy**

MHL is a major factor that directly influences the use of mental health services. For example, in a recent 2016 study, researchers found that positive attitudes towards mental health

treatment and higher levels of mental health literacy significantly predicted use of psychotherapy during the follow up period (Bonabi et al., 2016). In addition, greater perceived need for treatment and better literacy at baseline was predictive of psychiatric medication following six months (Bonabi at al., 2016). These findings suggest that high levels of mental health literacy lead to increased treatment engagement.

Conversely, the problematic nature of patient dropout has been a consistent issue in the United States. Recent research from 2009 suggests that more than one-fifth (22.6%) of mental health patients dropout from therapy. (Olfson et al., 2009). Personal level barriers that influence treatment choices such as drop out are a person's attitude, beliefs, and level of MHL. An individual may hold particular beliefs regarding the effectiveness of treatment, or he or she may lack a support network that promotes care seeking (Corrigan et al., 2014).

Low MHL can also play a crucial role in a person's overall physical health. The burden of mental health disorders is likely to have been underestimated because of inadequate appreciation of the connectedness between mental illness and other health conditions (Prince at al., 2007). In general, inadequate health literacy was consistently associated with a greater number of hospitalizations and greater use of emergency care (Berkman et al., 2004). Furthermore, inadequate health literacy predicted a poorer ability to take medications appropriately (Berkman et al., 2004).

In one study, researchers examined the differences in MHL from women with bulimia nervosa (BN) and healthy women. The researchers found that women with eating disorder symptoms were more likely to consider bulimic behaviors as acceptable, more likely to overestimate the occurrence of BN among women, and less likely to believe that a psychiatrist would be helpful in treatment of BN (Mond et al., 2010).

In 2007, researchers estimated that 14% of the global burden of disease can be attributed to neuropsychiatric disorders, due primarily to the chronically disabling nature of depression, alcohol use, and substance use disorders (Prince et al., 2007). Mental health is an undeniably important component of general well-being that tends to effect medical choices and aspects of self-care in in a number of different ways. In many ways, medication issues and symptom management for physical diseases can be directly or indirectly influenced by a person's level of health literacy, as well as MHL. Low MHL continues to be a major driving force related to help seeking behaviors, treatment engagement, and treatment adherence.

**Improving Mental Health Literacy Using Brief Psychoeducation**

Notably, researchers agree on the utility of psycho-education (PE) to improve patient awareness and knowledge of symptoms, in particular for populations that may be at an economic, stigmatized, or educational disadvantage (Vega et al., 2007). For example, researchers effectively used PE to counter the perception of stigma and the Hispanic community's reluctance to seek mental health services (Vega et al., 2007). Similar models of psychoeducation have already been adopted for medication adherence. For example, recent research found that individuals who received brief medication psychoeducational sessions for bipolar disorder had a higher level of medication adherence (Miklowitz et al., 2003).

In the same respect, a recent research study that used PE for Latina adolescents presenting to the emergency department for a suicide attempt, found that those who attended a PE group were significantly more likely to attend mental health treatment one month after being discharged (Hom et al., 2015). In many cases, brief PE models are effective interventions for improving treatment engagement and follow up. Even though the interaction and PE were brief, it seemed to have a lasting impact on the choices of patients.

The concept of brevity, relative to educating individuals about mental health is slowly but surely gaining traction. For example, emergency departments provide a unique forum to deliver ultra-brief PE to patients. A recent research project that focused on individuals arriving to the emergency room for a panic attack sought to examine the efficacy of ultra-brief PE in the form of a "Panic Information Card." The card presented simple facts about panic disorder, treatments available, and aided in symptom recognition. The researchers found that participants who received the card, utilized emergency department resources less than those who did not receive the card (Murphy et al., 2015). The findings add to the growing body of literature that brief PE can be used to expedite mental health referrals, decrease emergency department utilization and reduce costs for the medical system (Murphy et al., 2015).

In addition to these findings, the way in which information is presented can have a large influence on the amount of knowledge that is attained by individuals. One research study compared the efficacy of tablet-based information regarding depression with that of a printed pamphlet. The findings suggested that those who used a multimedia device, such as a tablet, were significantly more likely to demonstrate improved depression literacy and decreased stigma related to depression (Lu et al., 2016). This study demonstrated that brief multimedia-based education can improve MHL and enhance outcomes in mental health clinics.

In terms of MHL, a person's motivation to engage in treatment may very well depend on his or her understanding of the treatment being used. A recent research study of low income women found that offering a brief PE session regarding psychotherapy and antidepressants led to increased engagement in treatment (Miranda et al., 2002). Recent research has demonstrated that improving MHL may increase the likelihood of service utilization (Hom et al., 2015). These same researchers note that PE based interventions aimed at improving MHL can increase help

seeking behaviors (Hom et al., 2015). A recent research study of low income women found that offering a brief psychoeducational session regarding psychotherapy and antidepressants led to increased engagement in treatment (Miranda et al., 2002). In addition, brief passive psychoeducational models have been shown to help reduce symptoms of depression (Donker et al., 2009).

Recent research demonstrates that involving peer education can improve a range of outcomes for mental health consumers, including reduced comorbidity and mortality (Druss et al., 2010). Psychoeducational models are less expensive, more easily administered, and potentially more accessible than pharmacological and psychological interventions (Donker et al., 2009), although community education and involvement, medical professionals have had promising results in helping individuals gain a better understanding of their diagnosis and become active agents in their own care. MHL initiatives should continue to be developed and examined for their potential efficacy of educating the public and increasing help seeking behaviors.

**Available Strategies**

The concept of Mental Health First Aid programs designed to improve mental health literacy was brought to awareness by psychologist Dr. Anthony Jorm. However, research interventions aimed at improving mental health literacy are few and insufficient (Jorm, 2012). In addition, some current models tend to be excessively intensive and place unnecessary burdens on both researchers and the public. For example, Beyondblue, an initiative created by the Australian government and Dr. Jorm, is aimed at improving the public's knowledge of mental health disorders as a means to promote early intervention. The results are promising, but the impact of the intervention is longitudinal and measured over several years (Jorm, 2012).

The National Institute of Mental Health in the United States, has an eight-week curriculum that focuses on mental illness causes, risk factors, and stigma (Kelly, Jorm, & Wright, 2007). A pre and post-test explanation of the curriculum has led to improved knowledge about mental disorders and a reduction in stigmatizing attitudes (Kelly et al., 2007).

In the United States, Dr. Arthur Evans, former Commissioner of Behavioral Health and Intellectual Disability services in Philadelphia, and current CEO of the American Psychological Association, is one of America's greatest proponents of mental health first aid (Clay, 2013). Over the last few years, Dr. Evans set a goal of training 10% of Philadelphia's population, merely 150,000 individuals (Clay, 2013). Since 2011, Philadelphia has trained those working in the criminal justice system and public safety staffs (Clay, 2013). Although these initiatives have been successful, they tend to be time and resource consuming. Large scale strategies are of great importance; however, it is equally important to examine practical and simplified interventions that can be used in diverse settings.

As the importance of mental health awareness comes into focus, brief interventions and educational models must exist and be sustainable. A brief model that does exist in the United States is the consumer delivered educational intervention *(In our Own Voice)* created by the National Alliance on Mental Illness (Jorm, 2012). The brief but powerful intervention is an excellent vehicle for the delivery of mental health information.

Many studies have examined the potential impact of brief interventions with regard to improving mental health knowledge. For example, a recent study that had resident psychiatrists speak with students about depression, suicide, and substance abuse found an increase in their willingness to speak with a counselor or psychiatrist (Jorm, 2012). In this regard, researchers demonstrated the efficacy of simply speaking with students for a short period of time. Although

the concept of MHL is complex, it allows for many different opportunities and avenues for education. As large-scale initiatives aimed at improving MHL continue to develop, brief interventions for improving MHL should continue to be examined and advanced.

## Chapter 3: Hypotheses/Research Questions

**Research Questions:**

1. Will exposure to a brief MHL video focused on depression improve depression literacy?
2. Will exposure to a brief MHL video focused on depression video reduce levels of stigma towards depression?
3. Will exposure to a brief MHL focused on depression improve attitudes towards seeking professional help?

**Hypotheses:**

**1.** Depression literacy will be greater in the intervention group than in the control group.

**2.** The intervention group will demonstrate lower levels of stigma towards depression than the control group.

**3.** The intervention group will have better attitudes towards seeking professional health.

# Chapter 4: Method

## Study Design

As an experimental design, this post-test only, randomized controlled study utilized cross-sectional research methods to examine the efficacy of a brief psychoeducational video about depression on enhancing MHL among individuals. Specifically, an analysis of variance (ANOVA) was used to compare group mean differences for participants who were assigned to view the depression video (experimental condition) to participants assigned to view an educational video on nutrition matched in time (control condition) on a number of outcomes including depression literacy, levels of stigma towards depression, and attitudes towards seeking professional psychological help. The aim of the study was to measure and quantitatively examine these aspects of MHL by comparing participants who received and those who did not receive the psychoeducational video.

## Participants

Participants for this study were over the age of 18 years and must have had at least 35 minutes of computer and internet access. There was a total of 191 participants. The experimental group had a total of 103 participants and the control group had a total of 88 participants. Participants were drawn from the Philadelphia College of Osteopathic Medicine listserv as well as having been recruited through Facebook postings.

## Inclusion and Exclusion Criteria

The eligibility criteria for the study included those individuals who are over the age of 18, were English speaking, and had internet access for at least 35 minutes. Participation in this study was voluntary. The exclusion criteria were: individuals under the age of 18 years.

**Recruitment**

Subjects were recruited using the Philadelphia College of Osteopathic Medicine Listserv. Subjects were also recruited through social media, e-mails, and website forums. An e-mail or post was sent asking subjects to participate in an online study that was investigating mental health literacy. A link to the SurveyMonkey page was included. Participants who selected the link were re-directed to the SurveyMonkey page, provided demographic information and were made aware that they were eligible to enter a raffle for a gift card. Participants were required to indicate that they viewed the psychoeducational video in its entirety before continuing the study. Contact information for the investigator was provided for all participants.

**Measures**

The Depression Literacy Scale (D-Lit; Griffiths, Christensen, Jorm, Evans, & Groves, 2004), is a 22-item true/false test, seeking knowledge about depression. The higher score on this scale represents greater mental health literacy as it pertains to depression. An example of an item on the D-lit is: “People with depression may feel guilty when they are not at fault.” The D-Lit has good internal consistency and demonstrated sound test-retest reliability (Griffiths et al., 2004).

The Depression Stigma Scale (DSS; Griffiths, Christensen, Jorm, Evans, & Groves, 2004). The DSS has two subscales, each with 9 items that measure two different types of stigma: personal and perceived. The personal stigma measures the participant’s attitudes towards depression by asking how much they personally agree with a statement about depression. The perceived stigma was measured by asking participants to indicate what they think most other people believe about the depression statements. Higher scores indicate greater levels of depression stigma. The DSS scales, both personal ($\alpha = .77$) and perceived stigma ($\alpha = .82$)

demonstrated sound internal consistency. Additionally, the DSS scale demonstrated acceptable test-retest reliability.

The Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPH-SF; Fischer & Farina, 1995), is a widely cited measure of mental health treatment attitudes. The ATSPPH-SF is a 10-item measure aimed at identifying general attitudes towards seeking psychological help. The respondents were asked to indicate the degree to which they agree with a statement. Responses to each item were measured using a 4-point Likert scale rating. An example of a statement from the ATSPPH-SF is: “If I believed I was having a mental breakdown, my first inclination would be to get professional attention.” In terms of reliability, the ATSPPH-SF has a coefficient alpha equal to .84 and a 1-month test-retest reliability coefficient of .80; the current data yielded a coefficient alpha of .85 (Elhai et al., 2008).

The aforementioned scales were utilized in conjunction, as means to measure the basic constructs of MHL, as it specifically relates to depression, attitudes towards seeking professional psychological help, and stigma towards depression. The original measure of MHL was developed by Jorm et al. (1997) and since that time, a number of other measures have been developed but none of them has become the gold standard in measuring MHL (O'Connor, Casey, & Clough, 2014).

In Jorm's measure, respondents were randomly assigned a vignette and asked to identify the disorder. The disorders that were presented to respondents included depression, depression with suicidal thoughts, early schizophrenia, chronic schizophrenia, social phobia, and post-traumatic stress disorder (Reavley & Jorm, 2011). The Vignette Interview has been most extensively used by other researchers (O'Connor, Casey, & Clough, 2014). However, researchers

note that using vignettes does not allow for a total subscale score to be generated, which would assess the individual's total level of MHL (O'Connor, Casey, & Clough, 2014).

Additionally, vignettes are used as measures of comparison when determining population levels of MHL as opposed to measuring individual level responses to items (O'Connor, Casey, & Clough, 2014). O' Connor et al. (2014) sought to develop a robust scale that measures MHL. Although the researchers included additional subscales, they continued to use the vignette interview to measure an individual's ability to label a psychiatric disorder. For the intentions of this paper, the study focused on depression literacy, stigma regarding depression, and attitudes towards seeking professional psychological help, as opposed to the focusing solely on one's ability to label a psychiatric disorder.

**Intervention**

A short psychoeducational video was used for the purpose of this study. The video, "What is Depression" is a three minute and forty-five second video that was created by Therapist Aid, a service aimed at providing free worksheets, guides and videos on important topics in mental health. The video highlights several important topics as these pertain to mental health, including symptoms of depression and available treatment strategies. More specifically, the "What is Depression Video" provided information about the prevalence of depression, common symptoms of depression, and ways to recognize the onset of mental health symptoms. Furthermore, the video describes a number of different symptoms including sadness, anger, and hopelessness. Last, the video provided information related to the etiology of depression from a biopsychosocial perspective. The second video, for the control group, was a short educational video about nutrition that was matched in time to the depression video. The nutrition video offered information regarding healthy eating habits and did not discuss mental health symptoms.

**Procedure**

Upon agreeing to be a part of the study, each subject engaged in watching a brief educational video. At first, the participants were randomly assigned, either to intervention group or control group. Randomization ensured that a comparable number of participants composed the experimental and control groups. Once demographic information was completed, the experimental group viewed a short video covering important topics in mental health related to depression; the control group viewed a short educational video on nutrition. Following the videos, participants completed the D-Lit, DSS, & ATSPPH-SF. They were thanked for their time and had the option to enter in a raffle for an Amazon gift card by entering their email addresses. In this regard, the data from this study were not associated with any identifying information of participants.

## Chapter 5: Statistical Analysis

A power analysis was conducted in order to identify how many participants would be needed for the study. Estimating a moderate effect size of. 5 and an alpha of .05 (Cohen, 1992), it was projected that 64 participants would be needed in each of the two conditions. Descriptive statistics including race, gender, ethnicity, socioeconomic status, annual household income, highest level of education completed, and previous mental health treatment were collected via a demographic questionnaire.

For the following 3 hypotheses, the independent variable was either the depression video or the nutrition video; the dependent variables being assessed were, depression literacy, stigma towards depression and attitudes towards seeking professional psychological help.

Hypothesis 1: An Analysis of Variance (ANOVA) was used to analyze whether or not there was a between group mean difference in depression literacy, as measured by the depression literacy scale (D-LIT).

Hypothesis 2: An ANOVA was used to analyze whether or not there was a between group mean difference in depression stigma, as measured by the depression stigma scale (DSS).

Hypothesis 3: An ANOVA was used to analyze whether or not there was a between group mean difference in levels of attitudes towards seeking professional psychological help, as measured by the Attitudes Towards Seeking Professional Psychological Help-Short Form (ATSPPH-SF).

As discussed, prior to conducting the ANOVAs, a randomization check was conducted to determine that variance was adequately distributed between groups. Potential outliers were identified. Last, an exploratory analysis was conducted to examine the interaction between basic characteristics of participants and the aforementioned dependent variables.

# Chapter 6: Results

## Demographic Analysis

A total of 191 individuals participated in this research study. Of these participants, 30% were male and 70% were female. Regarding the age of participants, 67% were 18-29; 14% were 30-39; 5% were 40-49; 10% 50-59, and 4% were 60 years of age or older. Of participants who completed the study, 65% identified as White/Caucasian; 14% were Black/African American; 7% were Hispanic/Latino/a; 11% were Asian American/Pacific Islander, and 3% identified multiple ethnicities. Regarding the education of participants: 1 participant did not graduate high school; 5% were high school graduates; 9% had some college; 28% graduated college; 32% have some graduate school education, and 26% of participants graduated from graduate school.

## Randomization Check

To ensure randomization was adequate in distributing the variance across both conditions on the demographic variables, a chi-square analysis was utilized. As shown in Table 1, no significant between-group differences were found for age, $\chi^2$ (4) = 3.096, p = .542, gender, $\chi^2$ (1) = .034, p = .875, race/ethnicity, $\chi^2$ (2) = 2.836, p = .242, and education $\chi^2$ (4) = 1.983, p = .739. Therefore, it can be assumed that the randomization process was successful in equally distributing variance in the demographic variables measured across the two conditions.

Table 1

Demographic Characteristics of Participants (N = 191)

| Variable | n | % | $\chi^2$ | p |
|---|---|---|---|---|
| Condition | | | | |
| Experimental Group (Depression Video) | 103 | 54% | | |
| Control Condition (Nutrition Video) | 88 | 46% | | |
| Age | | | 3.096 | .542 |
| 18-29 | 127 | 66.6% | | |
| 30-39 | 25 | 13.5% | | |
| 40-49 | 11 | 5.2% | | |
| 50-59 | 20 | 10.4% | | |
| 60 and Older | 8 | 4.3% | | |
| Gender | | | .034 | .875 |
| Male | 57 | 29.85% | | |
| Female | 134 | 70.15% | | |
| Ethnicity | | | 2.836 | .242 |
| Caucasian | 124 | 64.6% | | |
| African American | 27 | 14.1% | | |
| Hispanic/Latino/a | 14 | 7.3% | | |
| Asian American/ Pacific Islander | 21 | 10.9% | | |
| Multiple Ethnicities | 5 | 3.1% | | |
| Educational Achievement | | | 1.983 | .739 |
| Did not Graduate High school | 1 | 00.52 % | | |
| High School Graduates | 10 | 5.2% | | |
| Some College | 19 | 9.37% | | |
| Graduated College | 51 | 29.60% | | |
| Some Grad School | 61 | 31.77% | | |
| Graduated Grad School | 49 | 25.52% | | |

**Results**

The first hypothesis was that there would be a significant effect regarding the Depression video group because participants who viewed the depression video would have higher scores on the Depression Literacy Scale (D-LIT).

To test this hypothesis, an Analysis of Variance was used to analyze whether or not there is a between group mean difference in depression literacy, as measured by the Depression Literacy Scale. For this analysis, the video type was the independent variable, and the D-LIT score was the dependent variable. The results indicate that there was no significant difference between groups as it related to level of depression literacy $F = (1,190) = 2.796$; $p = .096$). Therefore, the first hypothesis was rejected.

Table 2

*Results of Analysis of Variance for Between Group Differences in Depression Literacy*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 25.413 | 1 | 25.413 | 2.796 | .096 |
| Within Groups | 1727.253 | 190 | 9.091 | | |
| Total | 1752.667 | 191 | | | |

*Note. F= (1,190)= 2.796; p = 0.96)*

The second hypothesis was that there would be a significant effect regarding the depression video group because participants who viewed the depression video would have lower scores on the Depression Stigma Scale (DSS). In this hypothesis, lower scores on the DSS represent lower levels of stigma as it relates to depression.

To test this hypothesis, an Analysis of Variance was used to analyze whether or not there is a between group mean difference in depression stigma, as measured by the Depression Stigma Scale. For this analysis, the video type was the independent variable, and the DSS score was the

dependent variable. The results indicate that there was no significant difference between groups as it related to level of depression stigma F= (1,190) =.371; p = .543). Therefore, the second hypothesis was rejected.

Table 3

*Results of Analysis of Variance for Between Group Differences in Depression Stigma*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 21.315 | 1 | 21.315 | .371 | .543 |
| Within Groups | 10907.005 | 190 | 57.406 | | |
| Total | 10928.370 | 191 | | | |

*Note. F = (1,190) =.371; p =.543)*

The third hypothesis was that there would be a significant effect regarding the depression video because participants who viewed the depression video would have scores on the Attitudes Towards Seeking Professional Help scale (ATSPPH-SF). In this hypothesis, higher scores on the ATSPH scale DSS represent better attitudes towards help seeking behaviors.

To test this hypothesis, an Analysis of Variance was used to analyze whether or not there is a between group mean difference in attitudes towards seeking professional helpm as measured by the ATSPH. For this analysis, the video type was the independent variable, and the ATSPPH-SF score was the dependent variable. The results indicate that there was no significant difference between groups as it related to attitudes towards seeking professional help F = (1,190) =2.504; p = .115). Therefore, the third hypothesis was rejected.

Table 4

*Results of Analysis of Variance for Between Group Differences in Attitudes Towards Seeking Professional Help*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 54.878 | 1 | 54.878 | 2.504 | .115 |
| Within Groups | 4164.372 | 190 | 21.918 | | |
| Total | 4219.250 | 191 | | | |

*Note. F = (1,190) =2.504; p = .115)*

**EXPLORATORY HYPOTHESIS**

Given the lack of support for the primary hypotheses, exploratory analyses were also conducted to examine the interaction between personal experiences of participants and attitudes towards seeking professional help.

To test this effect, an Analysis of Variance was used to determine if having received previous mental health treatment led to better attitudes towards seeking professional psychological help, as measured by the ATSPPH-SF. For this analysis, having received mental health treatment was the independent variable and the ATSPPH-SF score was the dependent variable. The results indicate that there was a significant difference between individuals who have received mental health treatment and those who have not, as it relates to attitudes towards seeking professional psychological help $F= (1,190) = 16.911$; $p <.001$. In essence, individuals who have received mental health treatment have better attitudes towards seeking professional help, as measured by the ATSPPH-SF scale.

Table 5

*Results of Analysis of Variance for Between Group Differences in Attitudes Towards Seeking Professional Help Using Previous Mental Health Treatment as exploratory variable*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 344.845 | 1 | 344.845 | 16.911 | .000 |
| Within Groups | 3874.405 | 190 | 20.392 | | |
| Total | 4219.250 | 191 | | | |

*Note. F= (1,190) =16.911; p = .000)*

An analysis of variance was also used to determine if having received previous mental health treatment led to decreased levels of depression stigma, as measured by the Depression Stigma Scale (DSS). For this analysis, having received mental health treatment was the independent variable and the DSS score was the dependent variable. The results indicate that there was not a significant difference between individuals who have received mental health treatment and those who have not, as it relates to levels of depression stigma F= (1,190) = .091; p = .764 In essence, this study found that individuals who have received mental health treatment tended to have levels of depression stigma similar to those who have not received mental health treatment.

Table 6

*Results of Analysis of Variance for Between Group Differences in Depression Stigma Using Previous Mental Health Treatment as exploratory variable*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 5.209 | 1 | 5.209 | .091 | .764 |
| Within Groups | 10923.161 | 190 | 57.490 | | |
| Total | 10928.370 | 191 | | | |

*Note. F= (1,190) =.091; p = .764)*

Last, an analysis of variance was used to determine if having received previous mental health treatment led to increased levels of depression literacy, as measured by the Depression Literacy Scale (D-LIT). For this analysis, having received mental health treatment was the independent variable and the D-LIT score was the dependent variable. The results indicate that there was not a significant difference between individuals who have received mental health treatment and those who have not, as it relates to levels of depression literacy F= (1,190) = 2.745; p = .099. In essence, individuals who have received mental health treatment tended to have levels of depression literacy similar to those who have not received mental health treatment.

Table 7

*Results of Analysis of Variance for Between Group Differences in Depression Literacy Using Previous Mental Health Treatment as exploratory variable*

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 24.961 | 1 | 24.961 | 2.745 | .099 |
| Within Groups | 1727.706 | 190 | 9.093 | | |
| Total | 1752.667 | 191 | | | |

*Note. F= (1,190) = 2.745; p = .099)*

# Chapter 7: Discussion

## Findings

This study examined the feasibility, efficacy, and acceptability of a new mental health initiative aimed at improving MHL via a brief psychoeducational video. The underlying belief, based on prior results in research (Jorm et al., 2007) was that information and education are means to improve the public's level of MHL. The first hypothesis predicted that participants who viewed the depression video as opposed to the nutrition video, would score higher on the D-LIT, suggesting higher levels of depression literacy. However, the results did not support this hypothesis because there was not a significant difference between group means. In fact, the average score on the D-LIT for the depression video group was 16.50, and the average score for the nutrition video group was 15.78. This finding suggests that regardless of the video presented, participants had similar levels of depression literacy and knowledge.

The second hypothesis posited that participants who viewed the depression video would have lower levels of depression stigma, as measured by the DSS. The statistical analysis did not support this hypothesis because there were no significant differences between groups as it related levels of stigma. Furthermore, the average score on the DSS for participants in the depression video group was 46.25, and the average score on the DSS for the nutrition video group was 45.58. This finding raises the possibility that stigma may be a static variable that is not easily modified by a short video.

The final hypothesis was that participants in the depression video group would have better attitudes towards seeking professional help, as compared with the nutrition video group. This hypothesis was not supported because there was no evidence that viewing the depression video improved the participants' attitude towards seeking professional help. In fact, the average

score for the depression video group on the ATSPPH-SF scale was 32.09 and the average score for the nutrition video group on the ATSPPH-SF scale was 31.12. Therefore, this finding indicates that viewing a video about depression does not significantly influence a person's attitude towards seeking professional help.

When examining an exploratory hypothesis, this study compared between group mean differences for participants who have received previous mental health treatment versus participants who have not received mental health treatment, as it relates to attitudes towards seeking professional psychological help. The statistical analysis demonstrated a significant difference between groups as it related to attitudes for seeking professional help. The findings demonstrate that participants who have had previous mental health treatment, as compared with those who have not received mental health treatment, have better attitudes towards seeking professional psychological help, as measured by the ATSPPH-SF.

Based on the results of this investigation, it appears that participants generally had similar levels of depression literacy, depression stigma, and attitudes towards seeking professional help. If accurate, this suggests that there may be other and more effective ways to improve depression literacy, decrease stigma, and improve attitudes towards seeking professional help. Furthermore, the short video about depression used in this study does not appear to have a significant influence on a person's level of MHL or more specifically, on his or her depression literacy.

However, findings suggest that those individuals who have had prior mental health treatment have better attitudes towards seeking and receiving professional psychological help. This finding may be viewed as support for the utility of MHL training because it suggests that greater knowledge about and exposure to psychological treatment may lead to more positive perceptions of treatment and possibly increase utilization.

**Limitations**

There are some limitations that must be taken into consideration when examining this study. On a basic level, the collection of information that was gained via web-based survey is susceptible to inaccuracy and dishonesty. There is no way to completely ensure that participants were truthful regarding their answers to surveys.

The manner in which participants were recruited for this study may also limit the generalizability of the results. Individuals were recruited through Facebook posts and the Philadelphia College of Osteopathic Medicine listserv. Despite attempting to recruit from the general public by using Facebook posts, a large portion of respondents were current students and faculty at the Philadelphia College of Osteopathic Medicine. For this reason, levels of MHL may not fully represent those of the general public. Rather, these results may more representative of medical students and professionals. This may have particular implications for generalizing these findings to lower SES populations for whom MHL may be particularly limited or problematic.

The structure and design of the study may have also adversely influenced the external validity of the study. For example, MHL is considered multifaceted and is described as the: a) ability to recognize specific disorders or different types of psychological distress; (b) knowledge and beliefs about risk factors and causes; (c) knowledge and beliefs about self-help interventions; (d) knowledge and beliefs about the availability of professional help; (e) attitudes which facilitate recognition and appropriate help-seeking behavior, and (f) knowledge of how to seek mental health information (Ganasen et al., 2008). This study only sought to measure the level of a person's depression literacy, stigma towards depression, and attitudes towards seeking professional help.

For this reason, the study did not account for the multidimensional aspects of MHL. For example, the study focused solely on depression as opposed to a variety of mental health disorders. Additionally, the study did not measure a person's ability to recognize specific disorders or different types of psychological distress. A major reason for this abbreviated measurement of MHL is due to the depth of MHL. Unfortunately, few empirically validated measures exist that fully encapsulate and measure MHL. As a result, many studies that examine MHL do not rely on one single measurement of MHL, but rather use a number of different assessments that can provide an accurate depiction of a person's MHL.

Another major limitation of the study was the video that was utilized in the experimental condition. The "What is Depression" video provided helpful and accurate information. However, it may not have been effective in influencing a person's knowledge about depression. Furthermore, it was not necessarily designed with the intention of improving a person's level of MHL. Instead, the video provided basic information about depression and discussed potential treatment options. As a result, this video addressed only a portion of MHL.

In addition, the videos did not provide an opportunity to recognize specific types of disorders or psychological distress, which is an essential component of MHL. In retrospect, this is a major limitation of the study because one's ability to recognize psychological distress is undeniably associated with the use of self-help interventions and treatment engagement.

Finally, with regard to structure and methodology used in this study, it is important to recognize that the degree to which MHL is measured is questionable. The study utilizes three unique and empirically validated measures, the D-LIT, DSS, and ATSPH; however, they fall short of fully measuring and capturing the full concept of MHL. For this reason, the study should be considered a measurement of components that make up parts of MHL.

**Future Directions**

Based on these results, future research should continue to seek brief psychological interventions aimed at improving MHL. Although more intensive and thorough programs aimed at increasing levels of MHL exist, it is equally important to develop a psychoeducational model that is based in brevity and practicality. Furthermore, the utilization of such brief psychoeducation interventions should be considered as it relates to integrated medicine. For example, recent research that examined the efficacy of a single session, brief psychoeducational model that focused on distress tolerance for cancer patients found that a 20-minute psychoeducational video was an effective intervention in helping patients manage depression and insomnia, and improve overall quality of life (Lee et al., 2014). At the very least, similar investigations that utilize a more thorough form of psychoeducation, such as a 20-minute video, may allow for a better understanding of interventions that can have a positive influence on a person's level of MHL.

Future studies may also benefit from utilizing standardized measures of MHL or components that make up MHL. Although this study measured levels of depression literacy, stigma towards depression, and attitudes towards seeking professional help, it fell short of taking into consideration other components of MHL. Future research should focus on the broad scope of MHL in order to gain a better and well-rounded understanding interventions that can serve to enhance it. For this reason, the identification of a robust and valid assessment of MHL is extremely important for future research. Although several measures of MHL currently exist, the examiner of this study felt that they did not account for the full complexity of MHL. As previously mentioned, this was a contributing limitation because this study focused only on depression literacy, stigma, and attitudes towards seeking professional help.

Last, improvement of MHL is an extremely important concept as it relates to knowledge and information about mental health treatment. However, the focus of future research should also examine factors that contribute to actual engagement in mental health treatment and services. While increasing access to information and knowledge about mental health is vital, it is equally important to recognize factors within MHL that can contribute to treatment engagement. For example, research has demonstrated that stigma associated with having mental illness has a negative influence on attitudes and intentions towards seeking mental health services among older adults with depression (Conner et al., 2010). For this reason, future research should focus on examining interventions that can decrease stigma and facilitate treatment engagement.

If the results of this study are accurate, as they pertain to the exploratory hypotheses, that is, individuals who have received mental health treatment have better attitudes towards seeking professional psychological help, then it is imperative that individuals have the opportunity to interact with a mental health professional. The results of this study suggest that attitudes towards seeking professional help may be influenced by whether or not a person has ever interacted or received treatment from a mental health professional. Future research should be aimed at examining this possible relationship and influence further. Although many individuals do not access mental health treatment due to stigma or preconceived notions about treatment, it appears that access to quality treatment may in fact enhance a person's future attitudes or willingness to seek professional psychological help.

**Summary and Conclusions**

In conclusion, there were no significant differences between the experimental and control groups, relative to levels of depression literacy, stigma towards depression, or attitudes towards seeking professional help. However, when accounting for personal experiences of the

participants such as whether or not participants received previous mental health treatment, there was a significant difference relative to attitudes towards seeking professional help.

In essence, individuals who have received previous mental health treatment appeared to have significantly better attitudes towards seeking professional help. As previous mentioned, this finding has several implications, with the strongest being that healthy interactions with mental health professionals can enhance the public's attitudes towards seeking future professional psychological care.

Therefore, this investigation determined that healthy interactions between mental health professionals and the general public may aid in decreasing stigma and lead to improved attitudes towards seeking professional help. Given the role that stigma plays as a factor that inhibits seeking professional help, this study suggests that by attending treatment or interacting with a mental health professional, one could be more likely to engage in future treatment.

Despite this finding, it is important to note that the depression video did not lead to an increase in depression literacy or serve to decrease stigma towards depression. Furthermore, the depression video did not enhance attitudes towards seeking professional help. The aforementioned limitations of the study should be highly considered when interpreting these findings. However, the results do demonstrate a significant relationship between previous mental health treatment and enhanced attitudes towards seeking professional help. Overall, future research should continue to focus on ways to enhance MHL in the general public through the use of effective psychoeducational strategies. In addition, future research should focus on improving MHL as it relates, specifically to low SES and disadvantaged groups.

Future studies should continue to measure the effectiveness of brief psychoeducational interventions; however, it is also extremely important that mental health education for the public

is done on both a micro and macro level. The term healthcare extends far beyond the context of a hospital or a treatment center. Rather, in its truest form, healthcare is about both providing care and helping to inform the public understand ways that they could potentially access care. As it pertains to MHL, it is extremely important that the public is educated on self-help skills, recognition of mental health disorders, and that the public has the resources to seek and receive mental health services. On a micro level, hospitals and clinics are striving to improve MHL through information pamphlets about different programs, groups, or treatments that are available. On a macro level, policy makers are striving to educate the public at large about mental health.

Despite these efforts, MHL education for the public is diminutive when compared with its counterparts. For example, television commercials for psychiatric medication tend to list a number of potential warning signs for depression and identify a plethora of medication side effects. In some cases, commercials will even utilize research studies to demonstrate the efficacy of a psychiatric medication. Yet there are rarely, if any, commercials that discuss the benefits of psychotherapy or psychology as a practice. Similarly, there seems to be an absence of commercials that provide empirical evidence and research about the efficacy of therapeutic interventions for a mental health disorder. In this regard, the public seems to be well versed about different medication options and is even encouraged to ask their providers for more information.

Psychologists and mental health providers have the responsibility and professional duty to educate the public and use advocacy as a tool to reach underserved groups. However, in many cases, advocacy and educational efforts tend to fall short. In addition, the number of interventions or programs aimed at improving MHL is not commensurate with the actual burden of mental health problems. There tends to be a shortage of large scale interventions that educate

and inform the public about mental health. It is essential that psychologists and mental health professionals begin to think outside of the box and use different mediums and forums for public mental health education. As technology grows and large groups of people are able to be reached at the push of a button, it is imperative that mental health professionals begin to utilize available technological resources such as television and mobile applications to inform the public. It is necessary, as mental health professionals and advocates, to continue to explore different opportunities for education and advocacy as a way to help the public understand the value of mental health and the importance of sound psychological care.

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