Uncovering the Depression Treatment Gap: The Role of Motivation to Change, God Image, and Religious Affiliation

Cyrus Chiasson
Fort Hays State University, cyruschiasson@gmail.com

Follow this and additional works at: https://scholars.fhsu.edu/theses

Part of the Clinical Psychology Commons

Recommended Citation
DOI: 10.58809/FVFN3432
Available at: https://scholars.fhsu.edu/theses/3146

This Thesis is brought to you for free and open access by the Graduate School at FHSU Scholars Repository. It has been accepted for inclusion in Master's Theses by an authorized administrator of FHSU Scholars Repository. For more information, please contact ScholarsRepository@fhsu.edu.
UNCOVERING THE DEPRESSION TREATMENT GAP: THE ROLE OF
MOTIVATION TO CHANGE, GOD IMAGE, AND RELIGIOUS AFFILIATION

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial Fulfillment of the Requirements for
the Degree of Master of Science in Clinical Psychology

by

Cyrus Chiasson

B.S., Louisiana State University

Date April 26, 2020

Approved

Major Professor

Approved

Graduate Dean
ABSTRACT

Research analyzing factors that are indicative of treatment seeking for depression is warranted. In the United States, approximately 70% of individuals with depression do not receive treatment. The aim of the current study is to evaluate motivation to change, God image, and religious affiliation as predictors of current treatment engagement for depression. Motivation to change has previously been evaluated as a predictor of treatment outcome for depression but not as a predictor of current treatment engagement. Additionally, previous research indicates religious involvement is associated with less depressive symptomology but is in turn related to negative views towards mental health treatment seeking. However, research is limited in discerning whether these negative views impact the actual behavior of engaging in mental health treatment.

Participants were recruited utilizing Amazon’s Mechanical Turk™, an online survey administration system. Participants completed a series of questionnaires regrading depressive symptomatology, motivation to change, God image, and religious affiliation. The current study proposed four hypotheses. First, the 6 dimensions of one’s God image will be negatively related to depressive symptomatology. Secondly, motivation to change will be predictive of current treatment engagement among participants with depression, such that those with a higher motivation to change will be more likely to currently be engaged in treatment. Thirdly, one’s God Image will be predictive of current treatment engagement among participants with depression, such that participants with a more positive image of God will be less likely to currently be engaged in treatment. Finally, when considering participants with depression, those who are religiously affiliated will be less likely than those who are unaffiliated to be currently engaged in treatment.
Our first hypothesis was partially supported as 5 of the 6 God Image Scales were inversely correlated with depressive symptomology. Our second and third hypotheses were not supported as neither motivation to change or God image significantly predicted current treatment engagement among those with depression. Finally, our fourth hypothesis was not supported as Christians were more likely than atheists and agnostics to currently be in treatment for depression. The findings for the current study indicate it may be beneficial for clinicians to address one’s image of God in therapy. Additionally, the results suggest the negative views towards mental health treatment seeking held by religious individuals does not impede the actual behavior of engaging in treatment.

*Keywords*: depression, motivation to change, religion, image of God, religious affiliation, treatment engagement
ACKNOWLEDGEMENTS

I would first like to thank my advisor, Dr. Leo Hermann, for his oversight on this project. Thank you to each of my committee members. Dr. April Park, your supervision and insight during previous projects helped paved the way for this thesis. Dr. Whitney Whitaker, your guidance in the Experimental Statistics course as well as in numerous meetings regarding analyses for various projects were instrumental in conducting the results for this thesis. I would finally like to thank Dr. Robert Byer for serving as the outside department member. Your knowledge in the field of philosophy and religion as well as your inquires and suggestions during the prospectus certainly increased the quality of this project.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>viii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Motivation to Change</td>
<td>3</td>
</tr>
<tr>
<td>Religion and Depression</td>
<td>6</td>
</tr>
<tr>
<td>Image of God</td>
<td>8</td>
</tr>
<tr>
<td>Religion as a Barrier to Treatment Seeking</td>
<td>9</td>
</tr>
<tr>
<td>Purpose and Hypotheses</td>
<td>10</td>
</tr>
<tr>
<td>METHOD</td>
<td>12</td>
</tr>
<tr>
<td>Participants</td>
<td>12</td>
</tr>
<tr>
<td>Materials</td>
<td>13</td>
</tr>
<tr>
<td>Procedure</td>
<td>16</td>
</tr>
<tr>
<td>RESULTS</td>
<td>17</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>21</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>27</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>36</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Correlations of the GIS Scales with PHQ-9 Total scores</td>
</tr>
<tr>
<td>2</td>
<td>Summary of Logistic Regression Analysis for God Image Scales Total and Readiness Predicting Current Treatment Engagement in individuals with depression</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

1. Number of depressed individuals who are currently in treatment and who are not in treatment within religious affiliations.
# LIST OF APPENDICIES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IRB Approval Letter</td>
<td>36</td>
</tr>
<tr>
<td>B</td>
<td>Consent Form</td>
<td>37</td>
</tr>
<tr>
<td>C</td>
<td>Demographic Questionnaire</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>University of Rhode Island Change Assessment Scale (URICA)</td>
<td>42</td>
</tr>
<tr>
<td>E</td>
<td>The God Image Scales (GIS)</td>
<td>48</td>
</tr>
<tr>
<td>F</td>
<td>Patient Health Questionnaire-9 (PHQ-9)</td>
<td>52</td>
</tr>
</tbody>
</table>
Uncovering the Depression Treatment Gap: The Role of Motivation to Change, God Image, and Religious Affiliation

Depression is one of the most pervasive mental illnesses, with an estimated 322 million individuals who struggle with this disorder globally (World Health Organization, 2017). Additionally, depression is known to be the third leading cause of disability worldwide (James et al., 2018). The consequences of depression are debilitating as it causes afflicted individuals an inability to experience pleasure, to feel hopeless, to be unable to sleep or concentrate, and can even lead to self-harm and suicide (American Psychiatric Association, 2013). Due the prevalence and detrimental nature of this disorder, obtaining effective treatment for depression is of paramount importance.

Ironically, though depression is one of the more treatable mental illnesses as approximately two-thirds of those diagnosed with major depressive disorder experience recovery (Melartin et al. 2004; Mueller et al. 1996), a large number of depressed individuals elect to forgo treatment. Of adult individuals with depression in the United States, only 28.7% receive treatment (Olfson, Blanco, & Marcus, 2016).

Previous literature has attempted to ascertain the reasons why individuals with depression fail to seek treatment citing factors such as the stigma of mental illness (Schomerus, Matschinger, & Angermeyer, 2009b), general perceptions about the illness and treatment seeking process (Schomerus, Matschinger, & Angermeyer, 2009a), sociodemographic variables (Wang et al., 2005), severity of depressive symptoms (Sirey et al., 2001), and religion and spirituality (Mitchell & Baker, 2000). Of those, mental health stigma—a collection of social-cognitive processes that manifest through cues, stereotypes, prejudice, and discrimination (Corrigan, 2004)—is one of the most reported
and studied barriers to treatment seeking among those with a psychiatric diagnosis. For example, there is a negative correlation between intentions to seek psychiatric treatment for depression and desire for social distance from those who seek psychiatric treatment (Schomerus, et al., 2009b). Additionally, Sirey et al. (2001) found patients who exhibited lower levels of perceived stigma towards those with mental illness were more adherent to an antidepressant treatment regimen. In addition to stigma, perceptions about the illness itself and other attitudes about the treatment process may impede or facilitate treatment seeking for depression.

Schomerus et al. (2009a) revealed certain perceptions about the depression treatment process that facilitate an intention to seek care. For example, patients who believe treatment would be affordable and alleviate their depressive symptoms yet would not consume an excessive amount of time, are significantly more likely to report a greater intention to seek treatment. Recently, a meta-ethnography analyzed 21 studies based on exclusion criteria published between the year of 1997 and 2015 (Doblyte & Jimenez-Mejías, 2017). This meta-analysis extracted subthemes regarding views about obtaining treatment for depression in addition to perceptions about the illness itself that may explain some of the underlying mechanisms behind the observed non-help seeking trend for this disorder. Reflecting an attitude towards the treatment seeking process, help seeking as admitting that you have a problem, getting a label, emerged as a reoccurring subtheme. Participants within this comprehensive analysis stated help-seeking meant admitting the condition and subsequently being labeled as a patient which gave rise to negative emotions. This subtheme is in accordance with the previously reported findings regarding stigma and demonstrate the specific type of shameful cognitions that accompany depressed individuals. The subthemes that emerged regarding perceptions of
the illness of depression itself are of particular relevance to the current study. One such subtheme, *Normalization*, is defined as the participants’ tendency to apply external explanations to depressive symptoms, fail to recognize the presenting symptomology as an illness, or view the symptoms as everyday life problems. Additionally, participants had a tendency to perceive depression as not a “real” illness that would merit treatment seeking. Participants tended to contrast mental illnesses with physical ones, viewing physical illnesses as “real” due to the presentation of tangible symptoms. A final barrier to depression help-seeking noted in this study was low mental health literacy, as many patients struggled to recognize their syndrome as depression.

Personal characteristics such as sociodemographic variables and self-reported depression severity also affect treatment seeking behavior among individuals with depression. The most significant predictors of failure to initiate treatment contact with a professional in individuals with mental illness are age cohort (e.g., 18-29, 30-44, 45-59, 60 or more years) and age of onset (Wang et al., 2005). Those part of a younger cohort are more likely to initiate treatment contact than members of an older cohort. Also, those who experience the onset of a mental illness at an older age are significantly more likely to initiate treatment contact. In addition, higher self-reported severity of depression, as opposed to depression severity as indicated by a structured interview, was associated with greater adherence to an antidepressant treatment regimen (Sirey et al., 2001). This finding demonstrates the importance of one’s personal perception of their depressive symptomology in studying treatment seeking behavior.

**Motivation to Change**

Many of the above factors related to treatment seeking for depression involve set characteristics that are unable to be altered through implementation of interventions.
Though understanding the impact of these factors is advantageous to treatment, it is critical to identify a modifiable element related to depression treatment engagement in order to actively facilitate treatment seeking among individuals with depression. Due to the emergence of the aforementioned subthemes in the meta-ethnography of Doblyte and Jimenez- Mejías (2017) regarding common perceptions about the illness of depression, it is expected the construct of motivation to change would also be related to treatment seeking for depression. Motivation to change is based upon the framework of the stages of change model (McConnaughy, Prochaska, & Velicer, 1983) which delineates the process of change as a progression from four distinct stages: Precontemplation, Contemplation, Action, and Maintenance. Individuals in the Precontemplation stage do not recognize that a problem is present, and thus do not have any intention to change. Those in the Contemplation stage are considering taking action to change their problem but are ambivalent. Individuals in the Action stage are actively working towards changing their problem. Finally, those in the Maintenance stage have successfully made progress in changing and are working on relapse prevention. Therefore, for individuals to progress through the stages of change, they must first recognize that a problem worth changing is present and subsequently display a desire to change the problem. Many of the subthemes from the analysis of Doblyte and Jimenez- Mejías (2017) involved the participants’ failure to recognize depression as a significant problem worth treating. They commonly viewed their depressive symptomology as synonymous with everyday problems, not a real illness due to lack of physical manifestations, and sometimes completely failed to categorize their symptoms as depression due to low mental health literacy. A lack of recognition that a problem worth changing is present is a defining feature of the first stage of change, Precontemplation. Thus, it is possible some
individuals with depression who neglect to engage in treatment are stuck in a rudimentary stage of change. Fortunately, motivation to change is a malleable construct. Dench and Bennett (2000) revealed that a one-week motivational intervention significantly increased participants’ motivation for change compared to a control group. Additionally, Mason, Benotsch, Way, Kim, and Snipes (2014) discovered that an intervention group receiving daily text messages incorporating motivational interviewing techniques significantly increased in readiness to change as compared to the control group.

The most commonly used measure to access the stages of change is the University of Rhode Island Change Assessment (URICA) (Mander et al., 2012). The URICA was developed as an instrument for measuring the stages of change in psychotherapy (McConnaughy et al., 1983) and has been extensively utilized to predict treatment outcomes in individuals with substance abuse disorders (Mander et al., 2012). Additionally, the URICA has been utilized in psychotherapy research to predict treatment outcome for a variety of psychiatric disorders. A meta-analysis encompassing 8,238 patients revealed the ability of the URICA stages of change to predict psychotherapy outcomes across a wide range of mental health diagnoses at a clinically significant rate (Norcross, Krebs, & Prochaska, 2011). The more advanced the stage of change at pretreatment, the more likely progress was achieved from psychotherapy. It has also been applied to the depressed population specifically. Among adolescents with depression, higher scores on the Action subscale of the URICA at baseline predicted greater remission of depressive symptoms following treatment (Lewis et al., 2009). Similarly, Ibáñez (2016) revealed higher scores on the Action and Maintenance subscales as well as the overall composite score on the URICA (“readiness to change” score) predicted better responses to treatment among dysthymic individuals. Additionally, scores on the Action
subscale and overall “readiness to change” score predicted greater treatment attendance. Finally, among adolescents with depression, higher Precontemplation scores significantly predicted the utilization of a preventive measure (Adjunct Services for Attrition Prevention, ASAP) due to unmanageability of symptoms (May et al., 2007).

Among individuals with depression, motivation to change has solely been examined as a predictor of treatment outcome. To the best of the researchers’ ability, studies examining motivation to change as a predictor of current treatment engagement for depression could not be located. If motivation to change is revealed to be a significant predictor of treatment engagement in those with depression, a modifiable construct related to the staggering untreated rate for depression will be ascertained. Thus, interventions empirically validated to raise the construct of motivation to change, such as motivational interviewing (Wain et al., 2011), would theoretically catalyze depression treatment engagement. These interventions would provide a tangible means to address the depression treatment gap.

**Religion and Depression**

In addition to the aforementioned factors, religion and spirituality may be related to both depressive symptomology and mental health treatment engagement. According to the Pew Forum on Religion and Public Life, 92% of Americans believe in the existence of God or a supreme deity (Lugo et al., 2008). Additionally, the majority of Americans (56%) indicate religion is a very important aspect of their lives. The prevalence of religion in the United States has led to an upsurge in empirical works evaluating the relationship between religion and mental health.

Findings in this area indicate religious involvement is associated with less depressive symptomology (Bonelli, 2017; Koenig, 2009). All 18 studies examined in a
meta-analysis analyzing the relationship between religious involvement and depression presented evidence of less depression for more religiously involved individuals (Bonelli, 2017). Previous systematic reviews yielded similar results as two-thirds of studies analyzed reported significant inverse relationships between religion and rates of depressive disorder or depressive symptoms (Koenig, 2009). In one study, the average inverse correlation reported among approximately 100,000 individuals was equal in magnitude to that seen for sex and depression—a widely regarded significant factor in the prevalence of depression (Smith, McCullough, & Poll, 2003).

Miller and colleagues (2012) further examined specific factors such as personal importance of religion and spirituality and attendance of religious services. In support of previous studies, participants who attributed a high degree of importance to religion and spirituality were 73% less likely to be depressed. This effect was amplified in individuals who were at high-risk due to parental depression; those who highly valued religion and spirituality in their lives were 90% less likely to have depression. Furthermore, religious attendance reduced the likelihood of major depression by 76% in individuals with a high exposure to negative life events.

There are many proposed explanations for the inverse relationship between depression and religion. For example, religion provides various coping mechanisms for individuals to draw from, such as the social support of a church community and personal cognitions involving a supreme deity who loves and cares for them and responds to their needs (Koenig, 2012). The current study will focus on the aspect of a belief in a supreme being as an underlying mechanism behind the buffering effect of religion on depression.
Image of God

Research indicates certain conceptualization of God serve as a driving force behind the buffering effect of religion on depression (Bradshaw, Ellison, & Flannelly, 2008). A recent meta-analysis revealed positive God representations are associated with greater well-being, whereas negative God representations are associated with greater distress (Stulp, Koelen, Schep-Akkerman, Glas, & Eurelins-Bontekoe, 2019). Previous studies have specifically observed a relationship between various images of God and depression (Alavi, Amin, & Savoji, 2013; Bradshaw et al., 2008; Exline, Yali, & Sanderson, 2000; Greenway, Milne, & Clarke, 2003; Schaap-Jonker, Eurlings-Bontekoe, Verhagen, & Zock, 2002). Greenway and colleagues (2003) found a negative image of God correlated positively with depression in both males and females. Additionally, among males, depression scores were inversely predictive of “God cares” scores (i.e. feelings of being cared for by God). Similarly, a loving God imagery is inversely related to depression while the perception of God as remote was positively associated with depression (Bradshaw et al., 2008). Loving God imagery in this study was an amalgamation of characterizations of God as loving, forgiving, and improving.

Empirical evidence supports a more consistent relationship between negative images of God and depression as opposed to positive images of God (Alavi et al., 2013; Exline et al., 2000; Schaap-Jonker, et al., 2002). This is exemplified in the research of Schaap-Jonker, et al. (2002) revealing higher scores on depression were correlated with more negative feelings toward God. However, there was not a significant relationship found between positive feelings about God and depression. This finding was replicated among patients with cancer as negative God image was positively related to depression, but there was not an observed relationship between positive God image and depression.
(Alavi et al., 2013). In the same vein, alienation from God (e.g. “Feeling that God is far away”) emerged as the most significant predictor of depression in both a college student and clinical sample, while items assessing religious comfort (e.g. “Feeling loved by God”) were not associated with depression (Exline et al., 2000). Overall, research in this area indicates those who possess a positive a conceptualization of God or who do not view God negatively may combat negative feelings and circumvent depression by utilizing God as a wellspring of succor.

**Religion as a Barrier to Treatment Seeking**

Despite a wide endorsement of religion and spirituality by the American population, research is limited in examining its impact on the help seeking process for mental health problems (Mayers, Leavey, Vallisntou, & Baker, 2007). In the United States, a greater proportion of individuals seek help from clergy for psychological problems as compared to mental health professionals. Many individuals with depression who attribute importance to their religion and spirituality may be reluctant to seek secular therapy for a variety of reasons including fearing their beliefs will not be respected (Bonelli, Dew, Koenig, Rosmarin, & Vasegh, 2012; Mitchell & Baker, 2000), viewing engagement in therapy as an abandonment of their faith for secular treatments (Koenig, 2012), and fearing that seeking help may be seen by God as a rejection of his healing (Mitchell & Baker, 2000). Further, clients may feel they must suppress their religious beliefs in order to circumvent further pathologizing by mental health professionals (Leavey, 2004). In fact, seeking professional mental health services has been regarded as a last resort among religiously-minded individuals (Mitchell & Baker, 2000). It is possible this observed reluctance to seek treatment among religiously minded individuals is contributing to the preponderance of untreated depressed patients.
Purpose and Hypotheses

The purpose of the current study is to uncover understudied factors that may be contributing to the untreated rate for depression. To serve this purpose, the current study will attempt to fill the gap in the literature by evaluating motivation to change and Image of God as predictors of current treatment engagement for depression. The concrete behavior of current treatment engagement was examined as opposed to attitudes towards professional mental health treatments. Both motivation to change and Image of God have yet to be analyzed in this manner.

Previous studies applied motivation to change to individuals struggling with depression who were already engaged in treatment and then subsequently examined either treatment outcome (remission of depressive symptoms) or treatment adherence. Individuals with depression who have never engaged in treatment were not analyzed in these studies. In order to advocate for motivational interviewing as a possible intervention to address the treatment gap for depression, motivation to change must first be revealed to successfully differentiate depressed individuals currently in treatment from those who are not. Furthermore, examining the relationship between Image of God and depression treatment engagement may provide increased understanding of the impediment religious individuals experience when deciding whether or not to seek treatment for mental health issues.

The current study also includes secondary analyses that may serve as unique contributions to the extant literature. Many previous studies examining the relationship between image of God and depression utilized scales that yielded a binary distinction of the God image, positive and negative. The current study will expand on this binary
distinction by examining a comprehensive measure known as the God Image Scales (GIS, Lawrence, 1997) in association with depressive symptomology.

Furthermore, although previous studies indicate religion may be a barrier to mental health treatment seeking, there is a lack of definitive evidence for this claim. While some studies suggest medical/professional treatments are viewed as unsatisfactory by religious individuals (Cinnirella & Loewenthal, 1999; Loewenthal & Cinnirella, 1999; Ozmen et al., 2005), other findings report no difference in the perceived efficacy of medical/professional treatments between religiously affiliated and unaffiliated individuals (Baker & Cruickshank, 2009). Moreover, many of the aforementioned studies indicating religion may be a barrier to treatment seeking only include religiously affiliated individuals as the sole constituents of their sample. There is a paucity of studies that conduct comparative analyses between the religious and non-religious in evaluating differences in depression treatment behaviors and preferences. The study conducted by Baker and Cruickshank (2009) is one of the few to include such analyses, although the perceived efficacy of various treatments was examined rather than current treatment engagement. Subsequently, these studies indicate religious individuals hold negative views about secular mental health treatment, but it is inconclusive as to whether these negative views result in a lack of treatment engagement compared to unaffiliated individuals. The current study will further fill the gap in the literature by including a comparative analysis between religious affiliations in evaluating the concrete behavior of treatment engagement as opposed to attitudes towards treatment.

With previous research in mind, the following hypothesis were developed:

1. Lawrence’s six dimensions of the God image will be negatively correlated with depression symptomology.
2. Motivation to change will be predictive of current treatment engagement in individuals with depression.

3. One’s image of God will negatively predict current treatment engagement among individuals with depression.

4. Among those with depression, religiously affiliated individuals will be less likely to currently be engaged in treatment than unaffiliated individuals.

Method

Participants

467 participants in the United States recruited from an online survey administration system, Amazon’s Mechanical Turk™, were included in the statistical analyses for this study ($M_{AGE} = 38.28$, $SD_{AGE} = 13.21$; 184 men, 280 women, 2 other, 1 missing). Mechanical Turk is an online survey system designed to allow market researchers to conduct research and in return, participants are paid a minimal amount of money. For their participation in the current study, participants were awarded $0.50. There is no target ethnic group or gender for this study. However, use of Amazon Mechanical Turk allows for a wide variety of ethnicities and genders to participate in the study. Participants self-identified as Caucasian (70.7%), African American (11.3%), Asian/Pacific Islander (7.5%), Hispanic (7.9%), Native American/Alaskan Native (1.3%), and Other (1.3%). The mean PHQ-9 score for this sample ($M = 9$, $SD = 7.16$) indicates a mild level of depression severity (Kroenke, Spitzer, & Williams, 2001). Additionally, the mean Readiness score for this sample ($M = 8.40$, $SD = 2.21$) is indicative of the low end of the Contemplation stage (DiClemente, Schlundt, & Gemmel, 2004). This project was approved by the affiliated university Institutional Review Board. For all facets, this project strictly abided by the American Psychological Association’s ethical guidelines.
Scope of religious affiliation in this study

According to the most recent U.S. Religious Landscape Study conducted by the Pew Research Center, Christians and religiously unaffiliated individuals (atheists and agnostics) account for 93.4% of the U.S. population (Cooperman, Smith, & Ritchey, 2015). Within the sample of the current study, 309 individuals identified as Christians (denomination unspecified), 52 identified as atheist, and 53 identified as agnostic, accounting for 88.7% of the sample – demographics consistent with national data. Additionally, evidence suggests various religions should be conceptualized individually, rather than broadly categorized as “religiously affiliated” in evaluating the interplay between religion, spirituality, and mental health (Baker & Cruickshank, 2009). Therefore, depressed Christians, atheists, and agnostics were selectively included in the chi-square test of independence examining the relationship between religious affiliation and current treatment engagement. Due to a limited number of participants, those who indicated another religious affiliation were not included in the chi-square test of independence. These included participants who identified as Jewish ($n = 5$), Muslim ($n = 10$), Buddhist ($n = 9$), Hindu ($n = 2$), Mormon ($n = 1$), and Other ($n = 25$).

Materials

University of Rhode Island Change Assessment Scale (URICA). Participants completed the University of Rhode Island Change Assessment Scale (McConnaughy et al., 1983). The URICA is a 32-item self-report instrument that assesses one’s motivation to change. The URICA measures the four primary stages of change delineated in the TTM (Precontemplation, Contemplation, Action, and Maintenance) containing eight items for each subscale. Participants indicate the degree to which they agree with a
variety of statements through responses on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items consist of statements such as, “As far as I'm concerned, I don't have any problems that need changing.” Internal consistency scores of the URICA with populations used before lie within an acceptable range with Cronbach’s alpha levels ranging from 0.79 to 0.89 for individual subscales (McConnaughy et al., 1983; McConnaughy, DiClemente, Prochaska & Velicer, 1989). Additionally, factor analyses support the construct validity of the URICA. The validity of the URICA has been empirically demonstrated in multiple studies (see DiClemente & Hughes, 1990; Dozois, Westra, Collins, Fung, & Garry, 2004; McConnaughy et al., 1989; Polaschek, Anstiss, & Wilson, 2010). Cronbach’s alpha values for the subscales in the current sample ranged from .86 to .90 (Precontemplation = .90, Contemplation = .86, Action = .89, Maintenance = .87).

As the URICA was originally developed for administration to clinical populations, the item wording utilized by the Substance Abuse and Mental Health Services Administration (SAMSA) will be employed (Miller, 1999). Each item in the original scale that utilized the words “here” or “this place” will be modified. For example, the original item 5, “I'm not the problem one. It doesn’t make much sense for me to be here” will be adapted to “I’m not the problem one. It doesn’t make sense for me to consider changing.” Item 12, “I’m hoping that this place will help me to better understand myself” will be changed to “I’m hoping that I will be able to understand myself better.” A total of eight items were altered in this manner. Additionally, participants will be instructed to answer in terms of problems related to depressive symptomatology.
The God Image Scales (GIS). In order to assess individuals’ image of God, participants completed the God Image Scales (GIS, Lawrence, 1997). This scale is based upon Rizzuto’s (1979) concept of the God image as an internal, active schema of the type of person one believes God to be. This measure was chosen due to its comprehensive gauging of one’s God image. The GIS assesses six dimensions of the God Image: Presence, Challenge, Acceptance, Benevolence, Influence, and Providence. The dimensions were constructed based upon Philibert’s (1985) three self-image areas, feelings of belonging, fundamental goodness, and control. The Presence and Challenge subscale are components of the belonging domain. The Presence subscale assesses one’s belief that God is there for them (e.g. “God is always there for me.”) while the Challenge items are concerned with whether one believes God wants them to grow (e.g. “God encourages me to go forward on the journey of life.”). The Acceptance and Benevolence scales are constituents of the goodness domain. Acceptance is defined as one’s belief that they are good enough for God to love (e.g. “God loves me regardless.”), whereas Benevolence items are more focused on the character of God, gauging one’s belief that God is the sort of person who cares for humankind (e.g. “I think of God as more compassionate than demanding.”). Finally, Influence and Providence are dimensions within the control area. Influence questions assess the belief that one can control God (e.g. “God sometimes intervenes at my request.”). Providence items gauge one’s belief that God can control them (e.g. “God will always provide for me.”)

This instrument was developed for use in pastoral, clinical, and research settings to measure one’s God image from a relational and affective standpoint. Internal reliability for the GIS is high, demonstrated through Cronbach’s alpha values ranging from .81-.95. The instrument’s validity is demonstrated through the six scales’ correlations with
Intrinsic religious orientation (.56-.82). Cronbach’s alpha values for the subscales in the current sample ranged from .79 to .95 (Presence = .95, Challenge = .79, Acceptance = .81, Benevolence = .80, Influence = .91, Providence = .83)

**The Patient Health Questionnaire-9 (PHQ-9).** Participants completed the Patient Health Questionnaire-9 (Spitzer, Kroenke, & Williams, 1999). The PHQ-9 is an extensively used measure of depression severity (Titov et al., 2011). This measure has comparable psychometric properties to other widely used depression instruments, such as the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). However, the attributes of the PHQ-9, such as brevity of completion, free availability, and items mirrored upon the diagnostic criteria for depression, give this measure an advantage over the BDI-II (Titov et al., 2011). The PHQ-9 contains nine items where participants indicate the degree to which they have been bothered by the presented symptoms of depression over the past two weeks. Responses are indicated on a four-point Likert scale ranging from 0 (*Not at all*) to 3 (*Nearly every day*). According to Kroenke, Spitzer, and Williams (2001), internal reliability scores of the PHQ-9 are strong, with Cronbach’s alpha levels ranging from 0.86 to 0.89 in the populations utilized. Additionally, the construct, criterion, and external validity of the PHQ-9 is supported (Kroenke, Spitzer, & Williams, 2001). The Cronbach’s alpha for the current sample was .92.

**Procedure**

Before deciding to participate in the survey, a description was presented to Mechanical Turk workers that read “This study will ask you to answer questions about general demographic information, depression symptomatology, motivation to change, religious affiliation, your conceptualization of God, and previous treatment engagement.” Upon consent, participants were given a short questionnaire that included basic
demographic questions (gender, ethnicity, age, and religious affiliation) and an additional item assessing current treatment engagement for depression. This item read “Are you currently in treatment (psychotherapy and/or pharmacologic treatment) for depressive symptoms?”. Participants indicated either “yes” or “no” in response to this item. Afterwards, they were directed to complete the PHQ-9 (Spitzer et al., 1999) in order to assess for the presence of depressive symptoms. Participants were presented with the prompt, “Over the last 2 weeks, how often have you been bothered by any of the following problems?” Subsequently, participants’ motivation to change was assessed using the URICA (McConnaughy et al., 1983). Participants were presented with the prompt, “Each statement below describes how a person might feel when starting therapy or approaching problems in his or her life. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel. For all the statements that refer to your “problem” answer in terms of problems related to depressive symptomatology.” Finally, participants completed The GIS (Lawrence, 1997) in order to gauge one’s conceptualization of the type of person they believe God to be. After completing the study, participants were presented with a debriefing form and thanked for their time.

**Results**

**Correlations of GIS with PHQ-9 Total Scores**

In order to test the hypothesis that the 6 dimensions of God image would be negatively correlated with depressive symptomology, bivariate correlations were performed between all participants’ PHQ-9 total scores and the composite scores of the six dimensions of the GIS. With the exception of the Providence subscale, the results
support our hypothesis, as the remaining 5 subscales are significantly negatively correlated with depression severity (ranging from -.22 to -.44). This finding suggests individuals were less depressed the more they believe God is there for them ($r(457) = -.27, p < .001$), God wants them to grow ($r(457) = -.31, p < .001$), they are good enough for God to love ($r(457) = -.44, p < .001$), God cares for human kind ($r(457) = -.41, p < .001$), they can control God in some manner ($r(457) = -.22, p < .001$). The belief that God can control one’s self in some manner was not related to depressive symptomology ($r(457) = -.07, p = .153$). Thus, positive images of God in the areas of Presence, Challenge, Acceptance, Benevolence, and Influence are related to less depressive symptomology (see Table 1).

Table 1

Correlations of the GIS Scales with PHQ-9 Total scores (Depression severity)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence</td>
<td>-.27***</td>
</tr>
<tr>
<td>Challenge</td>
<td>-.31***</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-.44***</td>
</tr>
<tr>
<td>Benevolence</td>
<td>-.41***</td>
</tr>
<tr>
<td>Influence</td>
<td>-.22***</td>
</tr>
<tr>
<td>Providence</td>
<td>-.07</td>
</tr>
</tbody>
</table>

Note: *** $p < .001$, two tailed. $N = 457$.

GIS Total Score and Readiness as Predictors of Current Treatment Engagement in Individuals with Depression
When diagnosing major depressive disorder, research supports utilizing PHQ-9 cut-off scores between 8 and 11 (Manea, Gilbody, McMillan, 2012). Therefore, the below statistical analyses selectively included those whose PHQ-9 total scores were at least an 8. A binary logistic regression was performed to predict current treatment engagement in individuals with depression (N = 242). The outcome variable of treatment engagement was coded based on the binary response to the question, “Are you currently in treatment for depressive symptoms?” (0 = No, 1 = Yes). Two predictor variables were included in the model; the GIS total score and the Readiness score. The “readiness to change” composite score of the URICA was computed by subtracting the Precontemplation mean score from the sum of the Contemplation, Action, and Maintenance mean scores (DiClemente, Schlundt, & Gemmell, 2004). The GIS total score was computed by creating a composite score of all items of the God Image Scales. This composite score can be conceptualized as “positive God image” (Lawrence, 1997). A test of the full model compared with a null model was not statistically significant, $\chi^2 (2, N = 242) = 2.16, p = .340$. Therefore, our hypotheses that one’s God image and motivation to change will predict current treatment engagement for depression are not supported (see Table 2).

Table 2

*Summary of Logistic Regression Analysis for God Image Scales Total and Readiness Predicting Current Treatment Engagement in Individuals with Depression*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Exp(B)</th>
<th>$p$</th>
</tr>
</thead>
</table>
Treatment Engagement and Religious Affiliation

A chi-square test of independence was performed to examine the relationship between religious affiliation and current treatment engagement. The relationship between these variables was significant, $\chi^2 (2, N = 214) = 10.15, p = .006$. Christian individuals with depression ($N = 154$) were more likely than both atheist ($N = 30$) and agnostic ($N = 30$) individuals with depression to currently be engaged in treatment, ($Cramer’s V = .22, p = .006$) indicating a small to moderate effect size. Figure 1 displays the results of the chi-square test of independence. Despite a significant finding, this was in the opposite direction of our hypothesis as we expected Christians to be less likely than unaffiliated individuals to be currently engaged in treatment. Thus, our final hypothesis was not supported (see Figure 1).
Figure 1. Number of depressed individuals who are currently in treatment and who are not in treatment within religious affiliations.

Discussion

Five of the six dimensions of the GIS were inversely correlated with depression severity, thus partially supporting our first hypothesis. Our second and third hypotheses that the GIS and Readiness scores would be predictive of current treatment engagement in those with depression was not supported. Finally, Christians with depression were more likely than unaffiliated individuals with depression to be currently engaged in treatment. Thus, the final hypothesis was not supported as it was anticipated unaffiliated individuals would be more likely to currently be engaged in treatment.

The negative correlations between the dimensions of the GIS and Depression severity are in line with the previous findings indicating an inverse relationship between various positive conceptualizations of God (e.g. God is forgiving, loving, improving, and caring) and depression symptomology (Bradshaw et al., 2008; Greenway et al., 2003; Watson, Morris, & Hood, 1988). However, there are inconsistencies across studies when
examining positive conceptualizations of God and depressive symptomology, as some findings failed to observe a significant relationship between these variables (Alavi et al., 2013; Exline et al., 2000; Schaap-Jonker et al., 2002). The results of the current study serve to diminish ambiguity by providing supporting evidence for the negative relationship between positive conceptualizations of God and depression severity. Furthermore, this study evaluated six dimensions of the God image utilizing a comprehensive 72-item measure. This supplements many of the previous works examining God image and depression that primarily utilized measures narrower in scope which yielded limited distinctions of one’s image or conceptualization of God. This result has clinical implications - mental health professionals may want to encourage their depressed clients’ belief in God as a possible source of support for them. Additionally, mental health professionals may want to question their clients regarding the type of person they believe God to be. It is possible negative perceptions of God in the dimensions of the God image may be impeding symptom remission and the clinician may want to address this in therapy.

Although God Image and Motivation to Change were not significant predictors for current treatment engagement among those with depression, future studies should continue to evaluate these variables in this manner. It is possible the current circumstances surrounding the COVID-19 virus impacted the results. Due to many establishments closing down across the country, many individuals who would normally be receiving treatment for depressive symptoms may have not been receiving treatment at the time of the survey.

It is advantageous to continue to examine the role of motivation to change on treatment engagement as motivation to change can be increased by interventions. If
future studies reveal motivation to change to be predictive of treatment engagement for depression, interventions geared toward raising one’s motivation to change (e.g. motivational interviewing) could possibly catalyze treatment engagement. Motivational Interviewing (MI) is a brief intervention that is empirically supported to raise the construct of motivation to change (Wain et al., 2011). Given our target population of depressed individuals who choose not to seek out treatment, interventions requiring in-person attendance may be counter intuitive. Instead, a feasible solution for this population could be implementation of the “text message” intervention utilized in the aforementioned study by Mason et al. (2014). Although in-person interventions may not be ideal, MI has shown to increase treatment engagement and adherence for a variety of mental health problems (psychotic, mood, neurotic, stress-related, and eating disorders) in as little as one or two sessions (Baker & Hambridge, 2002). Conceptually, MI is an ideal intervention to facilitate treatment engagement among depressed individuals reluctant to seek help as it can be delivered without in-person attendance or in as little as one or two sessions. Thus, MI may circumvent some of the potential reasons why individuals choose not to seek treatment for their depressive symptoms. It is possible that those with depression who are hesitant to seek treatment would be more willing to participate in MI due to the lack of time constraints or necessity for in-person attendance. Based on our results, MI would subsequently facilitate treatment engagement for depression, allowing these individuals to potentially receive remission from their debilitating symptoms.

Although an individual with depression may be more willing to attend MI sessions as opposed to clinical treatment for depression, they still must display a willingness to participate in these interventions in order to become engaged. To bypass
this barrier, MI techniques could be implemented in schools. If schools were to require their students to participate in MI techniques/sessions as part of their curriculum, the need to actively seek these interventions would be removed. The prevalence of major depressive disorder is high among adolescents and young adults and has increased among these age groups in recent years (Mojtabai, Olfson, & Han, 2016). Therefore, it may be beneficial for both high schools and universities to implement MI into their curriculum. Evidence exists for the effectiveness of MI in increasing help seeking behaviors for depression among the college student population (Syzdek, Green, Lindgren, & Addis, 2016). In this study, male college students with a significant degree of internalizing symptoms (anxiety and depression) who underwent one session of gender-based MI exhibited a greater increase in parental and professional help seeking compared to a control group at a two-month follow up.

Despite an insignificant result in the current study, future studies should strive to ascertain whether an increased positive conceptualization of the type of person one believes God to be serves to impede treatment seeking in depressed individuals. If such a relationship is revealed, this may be related to the tendency of clients with strong religious beliefs to view seeking mental health treatment as a rejection of God’s healing (Mitchell & Baker, 2000). In particular, the presence, influence, and providence subscales contain items that attribute therapist and healing like qualities to God. Such items include, “I can talk to God on an intimate basis”, “God almost always answers my prayers”, and “Even when I mess things up, I know God will straighten them out”. It is possible that individuals who score highly on the GIS believe they can achieve the same healing from God for their depressive symptomology that they may receive from clinical treatment. Thus, these individuals do not elect to seek treatment.
Finally, depressed Christians were significantly more likely to currently be engaged in treatment compared to depressed unaffiliated individuals, a counterintuitive finding given the current body of work surrounding this topic. Many previous studies solely reported negative views about mental health treatment seeking among the religious and failed to compare religiously affiliated and nonaffiliated individuals on mental health treatment behaviors. Therefore, it is possible the negative assessment of mental health treatment among the religious does not actually impact the behavior of engaging in these treatments. However, it is possible that some individuals who identify as Christians do not experience the aforementioned negative views religiously-minded individuals hold towards secular mental health treatments. It is possible that these negative views, such as the fear that their beliefs will not be respected (Bonelli, Dew, Koenig, Rosmarin, & Vasegh, 2012; Mitchell & Baker, 2000) and viewing psychotherapy as an abandonment of faith for secular treatments (Koenig, 2012), are more likely to be embodied by those who score highly on a construct such as religious involvement, rather than by those who simply identify as Christian. Future studies should consider the impact of religious involvement when exploring factors related to treatment seeking for depression.

In addition to the circumstances surrounding the COVID-19 virus certain limitations of this study should be noted. First, members of the general population were sampled in this study and individuals with depression were not specifically targeted by the utilized sampling procedure. However, those whose PHQ-9 score were at least an 8, an ideal cutoff score for diagnosing major depression, were selectively analyzed. Thus, conclusions are able to be generalized to the population in question, depressed individuals, despite not being the sole constituents of the sample. Finally, this study draws implications about depression based solely on participants PHQ-9 scores. Self-
report measures are not the only component clinicians consider when making a diagnosis of depression. Other factors should be taken into account in the future to validate the current findings, such as the clinical interview, reports from those close to the individual, and family history of mental illness (Bocskor, Hunyadi, & Vince, 2017). Nevertheless, an individual’s perception of their own depressive severity may be more important than a clinician’s judgement of depressive severity when evaluating treatment seeking behaviors (Sirey et al., 2001). Therefore, in future studies analyzing depression treatment seeking or engagement, it may be beneficial to include self-report measures of depression even when utilizing a professionally diagnosed sample.

Future studies should strive to include depressed individuals diagnosed by professional clinicians when evaluating factors indicative of treatment engagement. This will allow the findings of the study to be directly generalized to the depressed population. Additionally, future research should strive to include a significant amount of participants from other religious affiliations when evaluating differences in depression treatment behaviors and preferences. In conclusion, it may be beneficial for mental health practitioners to consider one’s God image and its relationship to depressive symptomology. Adapting the treatment goal of fostering a positive God image may facilitate remission from depressive symptoms.
References


http://dx.doi.org/10.1037/t00742-000


Appendix A – IRB Approval Letter

Thank you for your submission of New Project materials for this research study. Fort Hays State University IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Limited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form unless documentation of consent has been waived by the IRB. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document. The IRB-approved consent document must be used.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.
Appendix B – Consent Form

Consent Form:

NAME OF THE STUDY: Uncovering the Depression Treatment Gap: The Role of Motivation to Change, God Image, and Religious Affiliation

INTRODUCTION
The Department of Psychology at Fort Hays State University supports the practice of protection for human subjects participating in research. **You are being asked to participate in a research study. This survey contains sensitive questions related to mood and suicidality. It is your choice whether or not to participate. If you choose to participate, you may withdraw from the study at any time.** The following information is provided for you to decide whether you wish to participate in the present study. You may refuse to electronically sign this form and not participate in this study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

PURPOSE OF THE STUDY
You are invited to join a research study. The purpose of this project is to understand the differentiating characteristics between depressed individuals who seek treatment versus those who do not. Specifically, this study will evaluate if religious affiliation, motivation to change, and one’s image of God can predict current treatment engagement for depression. Additionally, this study will examine if an individual’s image of God affects overall severity of depressive symptomology.

PROCEDURES
If you choose to participate, you will be asked to electronically sign this consent form by clicking on the “continue” button. You will then be asked to take a series of surveys assessing general demographic information, depressive symptomology, motivation to change, and previous treatment engagement. There are no right or wrong answers in this study, so please answer honestly. The estimated length of time for participation in this study is 15-20 minutes. Approximately 400 participants will be in this study.

RISKS
We do not anticipate more than minimal risk with this study, and we do not expect you to experience more risk than what you might normally encounter in everyday life. However, if you feel distressed or uncomfortable by any of the questions you may choose not to answer and/or discontinue your participation. Participating in this study is completely voluntary and deciding to withdraw from the study will not result in any penalties. However, participants who do not complete the survey will receive no monetary compensation for participation in this project. If you feel uncomfortable while completing this study, please contact the researchers listed below.

BENEFITS
It is reasonable to expect the following benefits from participation in the study: Participants may learn more about how their religious affiliation, motivation to change,
and image of God may be impacting depressive symptoms and impeding or facilitating their willingness to engage in treatment for depression. A monetary compensation of $0.50 will be awarded after completion of the study. The implications of this study may inform the psychotherapeutic practice of professionals willing to incorporate religion and spirituality in treatment. Additionally, this study may uncover a means to catalyze treatment engagement for those with depression.

PARTICIPANT CONFIDENTIALITY (HOW WILL PRIVACY BE PROTECTED)
We will be taking the following steps to keep information about you confidential, and to prevent it from unauthorized disclosure: the principal investigator will be the only individual that has access to the original data in this study. He will store this data on a storage device (password protected laptop) that only he has access to. If published or presented, then the data will be given in aggregate form. Your name will not be associated in any publication or presentation with the information collected about you or with the research findings from this study.

REFUSAL TO SIGN CONSENT AND AUTHORIZATION
You are not required to electronically sign this Consent and Authorization form and you may refuse to do so without any penalty. However, if you refuse to sign electronically, you cannot participate in this study.

CANCELLING THIS CONSENT AND AUTHORIZATION
You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose further information collected about you, in writing, at any time, by sending your written request to: Dr. Leo Herrman, Department of Psychology, 600 Park St. Hays, KS 67601 or by email to Cyrus Chiasson (cbchiasson@mail.fhsu.edu).

If you cancel permission to use your information, the researchers will stop collecting additional information about you. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above.

QUESTIONS ABOUT PARTICIPATION
Questions about procedures should be directed to the researchers listed at the end of this consent form.

PARTICIPANT CERTIFICATION:
I have read this Consent and Authorization form. I understand that if I have questions about my rights as a research participant, I may contact the Psychology Department ethics chair, Brooke Mann (bmann@fhsu.edu), email irb@fhsu.edu, or write the Office of Scholarship and Sponsored Projects (OSSP) Fort Hays State University, 600 Park St., Hays, Kansas 67601. The Office of Scholarship and Sponsored Projects (OSSP) can also be contacted by email via Dr. Whitney Whitaker (wkwhitaker@fhsu.edu).
I agree to take part in this study as a research participant. By checking this button, you are indicating that you have read and understood this document and that you agree to proceed with the study.

RESEARCHER CONTACT INFORMATION:

Cyrus Chiasson  
Principal Investigator  
Department of Psychology  
600 Park St.  
Fort Hays State University  
Hays, KS 67601  
(985) 981-0580  
cbchiasson@mail.fhsu.edu

Dr. Leo Herrman  
Faculty Research Supervisor  
Department of Psychology  
600 Park St.  
Fort Hays State University  
Hays, KS 67601  
(785) 628-5896  
lpherrman@fhsu.edu
Appendix C – Demographic Questionnaire

Please answer the following demographic questions about yourself.

1. Age _________

2. Sex
   1-male
   2-female
   3-other

3. Ethnicity
   1 - Caucasian
   2 - African American
   3 - Asian/Pacific Islander
   4 - Hispanic
   5 - Native American/Alaskan Native
   6 – Other

4. Religious Affiliation:
   a. Christian
   b. Jewish
   c. Muslim
   d. Buddhist
   e. Hindu
   f. Unaffiliated (Atheist and/or Agnostic)
   g. Other

5. Are you currently in professional mental health treatment (psychotherapy and/or pharmacologic treatment) for depressive symptoms? Note: By professional mental health treatment, we mean treatment by a licensed mental health professional (e.g., Licensed Professional Counselors (LPCs), Licensed Marriage and Family Therapists (LMFTs), Licensed Mental Health Counselors (LMHCs), Licensed Clinical Social Workers (LCSWs), Licensed Pastoral Counselor, Licensed Psychologists, and Psychiatrists
   a. Yes
   b. No

6. Please indicate whether your treatment provider advertises the incorporation of religion and spirituality in their practice (e.g., Licensed Professional Christian Counselor, etc.)
   a. Yes
   b. No
   c. I am not currently receiving treatment
7. Please indicate the type of professional mental health treatment you are currently receiving, if any (check all that apply)
   a. Licensed Professional Counselor (LPC)
   b. Licensed Professional Christian Counselor
   c. Licensed Marriage and Family Therapist (LMFT)
   d. Licensed Mental Health Counselors (LMHCs)
   e. Licensed Clinical Social Workers (LCSWs)
   f. Licensed Pastoral Counselor
   g. Licensed Psychologist
   h. Psychiatrist
   i. Other (please indicate the type of treatment provider in box below)
   j. I am not currently receiving treatment

8. How likely are you to seek treatment for depressive symptoms?
   a. Very likely
   b. Moderately likely
   c. Neither likely nor unlikely
   d. Moderately unlikely
   e. Very unlikely
Appendix D – University of Rhode Island Change Assessment Scale (URICA)

University of Rhode Island Change Assessment Scale (URICA)

Each statement below describes how a person might feel when starting therapy or approaching problems in his life. Please answer these questions in terms of problems related to depressive symptomology. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

1. As far as I'm concerned, I don't have any problems that need changing.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

2. I think I might be ready for some self-improvement.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

3. I am doing something about the problems that had been bothering me.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

4. It might be worthwhile to work on my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

5. I'm not the problem one. It doesn't make much sense for me to consider changing.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree
6. It worries me that I might slip back on a problem I have already changed, so I am looking for help.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

7. I am finally doing some work on my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

8. I've been thinking that I might want to change something about myself.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

9. I have been successful in working on my problem, but I'm not sure I can keep up the effort on my own.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

10. At times my problem is difficult, but I'm working on it.
    1 = Strongly Disagree
    2 = Disagree
    3 = Undecided
    4 = Agree
    5 = Strongly Agree

11. Trying to change is pretty much a waste of time for me because the problem doesn't have to do with me.
    1 = Strongly Disagree
    2 = Disagree
    3 = Undecided
    4 = Agree
    5 = Strongly Agree

12. I'm hoping that I will be able to understand myself better.
    1 = Strongly Disagree
    2 = Disagree
3 = Undecided
4 = Agree
5 = Strongly Agree

13. I guess I have faults, but there's nothing that I really need to change.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

14. I am really working hard to change.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

15. I have a problem, and I really think I should work on it.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

16. I'm not following through with what I had already changed as well as I had hoped, and I want to prevent a relapse of the problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

17. Even though I'm not always successful in changing, I am at least working on my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

18. I thought once I had resolved the problem I would be free of it, but sometimes I still find myself struggling with it.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree
19. I wish I had more ideas on how to solve my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

20. I have started working on my problem, but I would like help.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

21. Maybe someone or something will be able to help me.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

22. I may need a boost right now to help me maintain the changes I've already made.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

23. I may be part of the problem, but I don't really think I am.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

24. I hope that someone will have some good advice for me.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

25. Anyone can talk about changing; I'm actually doing something about it.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
5 = Strongly Agree

26. All this talk about psychology is boring. Why can't people just forget about their problems?
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

27. I'm struggling to prevent myself from having a relapse of my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

28. It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

29. I have worries, but so does the next guy. Why spend time thinking about them?
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

30. I am actively working on my problem.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

31. I would rather cope with my faults than try to change them.
   1 = Strongly Disagree
   2 = Disagree
   3 = Undecided
   4 = Agree
   5 = Strongly Agree

32. After all I had done to try to change my problem, every now and again it comes back to haunt me.
1 = Strongly Disagree
2 = Disagree
3 = Undecided
4 = Agree
5 = Strongly Agree
Appendix E – The God Image Scales (GIS)

The God Image Scales (Lawrence, 1997)
(Participants respond on a four-point Likert scale: Strongly Disagree, Disagree, Agree, Strongly Agree)

1. When I obey God’s rules, God makes good things happen for me.
2. I imagine God to be rather formal, almost standoffish.
3. I am sometimes anxious about whether God still loves me.
4. Asking God for help rarely does me any good.
5. I am confident of God’s love for me.
6. God does not answer when I call.
7. I know I’m not perfect, but God loves me anyway.
8. The voice of God tells me what to do.
9. I have sometimes felt that I have committed the unforgivable sin.
10. Even when I mess things up, I know God will straighten them out.
11. God never challenges me.
12. Thinking too much could endanger my faith.
13. I think of God as more compassionate than demanding.
15. I can feel God deep inside of me.
16. God’s love for me has no strings attached.
17. God doesn’t feel very personal to me.
18. No matter how hard I pray, it doesn’t do me any good.
19. Even when I do bad things, I know God still loves me.
20. I can talk to God on an intimate basis.
21. What happens in my life is largely a result of decisions I make.
22. I think God even loves atheists.

23. God nurtures me.

24. I get no feeling of closeness to God, even in prayer.

25. God loves me only when I perform perfectly.

26. God loves me regardless.

27. God takes pleasure in my achievements.

28. I can’t imaging anyone God couldn’t love.

29. God keeps asking me to try harder.

30. God is always there for me.

31. I get no help from God even if I pray for it.

32. Being close to God and being active in the world don’t mix.

33. God can easily be provoked by disobedience.

34. I often worry about whether God can love me.

35. God is in control of my life.

36. God wants me to achieve all I can in life.

37. I am a very powerful person because of God.

38. God will always provide for me.

39. I think God mostly leaves people free.

40. If God listens to prayers, you couldn’t prove it by me.

41. God is looking for a chance to get even with me.

42. God’s mercy is for everyone.

43. God’s love for me is unconditional.

44. I know what to do to get God to listen to me.

45. God asks me to keep growing as a person.
46. I think God only loves certain people.
47. God almost always answers my prayers.
48. God doesn’t want me to ask too many questions.
49. God does not do much to determine the outcome of my life.
50. God lets the world run by its own laws.
51. Even if my beliefs about God were wrong, God would still love me.
52. I am not good enough for God to love.
53. God’s compassion knows no religious boundaries.
54. I sometimes feel cradled in God’s arms.
55. God has never asked me to do hard things.
56. Running the world is more important to God than caring about people.
57. I often feel that I am in the hands of God.
58. I don’t think my faith gives me any special influence with God.
59. Mostly, I have to provide for myself.
60. I am particularly drawn to the image of God as a shepherd.
61. God feels distant to me.
62. I think human achievements are a delight to God.
63. I rarely feel that God is with me.
64. I feel warm inside when I pray.
65. I am pretty much responsible for my own life.
66. God rarely if ever seems to give me what I ask for.
67. I think God must enjoy getting even with us when we deserve it.
68. God encourages me to go forward on the journey of life.
69. God sometimes intervenes at my request.
70. God never reaches out to me.

71. God doesn’t mind if I don’t grow very much.

72. I sometimes think that not even God could love me.
Appendix F – Patient Health Questionnaire-9 (PHQ-9)

Patient Health Questionnaire-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems?
(Participants indicate either 0 = Not at all, 1 = Several days, 2 = More than half the days, or 3 = Nearly every day)

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling or staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down
7. Trouble concentrating on things, such as reading the newspaper or watching television
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual
9. Thoughts that you would be better off dead or of hurting yourself in some way
Fort Hays State University
FHSU Scholars Repository
Non-Exclusive License Author Agreement

I hereby grant Fort Hays State University an irrevocable, non-exclusive, perpetual license to include my thesis ("the Thesis") in FHSU Scholars Repository, FHSU's institutional repository ("the Repository").

I hold the copyright to this document and agree to permit this document to be posted in the Repository, and made available to the public in any format in perpetuity.

I warrant that the posting of the Thesis does not infringe any copyright, nor violate any proprietary rights, nor contains any libelous matter, nor invade the privacy of any person or third party, nor otherwise violate FHSU Scholars Repository policies.

I agree that Fort Hays State University may translate the Thesis to any medium or format for the purpose of preservation and access. In addition, I agree that Fort Hays State University may keep more than one copy of the Thesis for purposes of security, back-up, and preservation.

I agree that authorized readers of the Thesis have the right to use the Thesis for non-commercial, academic purposes, as defined by the "fair use" doctrine of U.S. copyright law, so long as all attributions and copyright statements are retained.

To the fullest extent permitted by law, both during and after the term of this Agreement, I agree to indemnify, defend, and hold harmless Fort Hays State University and its directors, officers, faculty, employees, affiliates, and agents, past or present, against all losses, claims, demands, actions, causes of action, suits, liabilities, damages, expenses, fees and costs (including but not limited to reasonable attorney's fees) arising out of or relating to any actual or alleged misrepresentation or breach of any warranty contained in this Agreement, or any infringement of the Thesis on any third party's patent, trademark, copyright or trade secret.

I understand that once deposited in the Repository, the Thesis may not be removed.

Thesis: Uncovering the Depression Treatment Gap

Author: Cyrus Chiasson

Signature: [Signature]

Date: 4/30/20