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Clergy Characteristics as Predictors of Mental Health Literacy

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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The mental health literacy (MHL) rates of Christian clergy in the United States remains underinvestigated in the current literature. This gap of knowledge is problematic for the large numbers of individuals with mental illness who seek assistance from clergy and may receive inadequate care for their concerns. As theoretically designated by the behavioral models of health care and MHL research, denomination-type, educational variables, and demographic characteristics were investigated as potential predictors of MHL. A sample of 238 Christian clergy from throughout the United States completed the web-based Mental Health Literacy Scale and demographic questionnaire. Results of analysis of variance (ANOVA) revealed no significant differences among MHL scores of Evangelical Protestant, Mainline Protestant, Catholic, and Historically Black Protestant groups. Results of the multiple linear regressions showed that number of years of postsecondary school, degree-type, age, and geographical location were not significant predictors of MHL scores. Higher numbers of clinical MH training courses and female gender did significantly predict higher levels of MHL scores. The findings provided the first parametric measure of a diverse, national sample of Christian clergy and indicated a need for increasing MHL trainings. Results also provided counselors and counselor educators with information useful for initiating and modeling interprofessional trainings, collaborations, and referral partnerships with clergy who currently serve as front-line mental health workers to millions of U.S. residents. The results may also inform social justice initiatives to reduce mental health care disparities in underserved populations.

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Dedication

This dissertation is dedicated to the global community around the world who remain in need of encouragement, freedom, respect, support, and empowerment. I pray, study, and strive in an effort to stand with you in the pain, struggles, and victories. You are not alone.

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Thank you to Jesus. With endless gratitude to my husband of 19 years, Dr. Garry Vermaas, and to my six children, James Jiacheng, Garret Douglas, Jolyn Rose, Shiya Rose, Luxmi Rose, and William Qiubao Vermaas. And thank you to my mentors in both personal and professional aspirations, Dr. Judy Green, Dr. Melinda Haley, Dr. Laura Haddock, and Dr. Anita Neuer Colburn.

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Chapter 1: Introduction to the Study

In a recent national survey, the Substance Abuse and Mental Health Services Administration (SAMHSA, 2012) found that approximately 60% of individuals diagnosed with any type of mental illness (AMI) and 40% diagnosed with a serious mental illness (SMI) reported not receiving any formal mental health assistance. Moreover, individuals of ethnic minority status reportedly received help with 50% less frequency than their White/Caucasian counterparts (John & Williams, 2013; Mills, 2012; SAMHSA, 2012). In seeking to reduce these disparities, researchers have noted that informal helpers, especially clergy members, may provide conduits to the formal mental health system (Lopez, Barrio, Kopelowicz, & Vega, 2012; Snowden, 2012; Sue, Cheng, Saad, & Sue, 2012). In fact, over the last 50 years researchers have found that as many as 40% of U.S. residents look to clergy for their psychological needs (Chalfant et al., 1990; Gurin, Veroff, & Feld, 1960; Polson & Rogers, 2007; Weaver, Flannelly, Flannelly, & Oppenheimer, 2003). Furthermore, researchers also revealed a significant tendency to seek out clergy instead of formal mental health care providers (MHPs) among cultural groups that include African/Black, Asian, Hispanic/Latino, elderly, rural, veteran, and female populations (John & Williams, 2013; Kirchner et al., 2011; Mills, 2012; Pickard & Tang, 2009; Stanford, 2007).

In recognizing this demand for clergy assistance, clergy participants from other studies acknowledged that their training for addressing psychological problems was limited and claimed they would refer serious cases to MHPs (Moran et al., 2011; Payne, 2013). In actual practice, however, clergy referrals to MHPs remain uncommon, only

referring about 10% of their cases to formal providers (Farrell & Goebert, 2008; Pickard, 2012; Polson & Rogers, 2007; Standford & Philpott, 2011). Although researchers have examined attitudinal (e.g., interprofessional distrust) and external reasons (e.g., lack of access) for this discrepancy, the primary question of whether clergy recognize SMI in the first place must also be investigated before other explanations for low referral rates can be established (Farrell & Goebert, 2008; Ross & Standford, 2014; Sullivan et al., 2013).

In seeking to understand whether Christian clergy recognize SMI, I identified only three studies conducted within the past decade (Chevalier et al., 2015; Pillion, Reed, & Shetiman, 2012; Stansbury, Marshall, Harley, & Nelson, 2010). Those studies examined the mental health literacy (MHL) abilities of less than 200 total clergy across the United States and only sampled homogeneous populations in terms of denomination and geography. Given the lack of data and limited generalizability of these previous findings, potential collaborators and referral partners may not fully understand the MHL of clergy in relation to their referral practices.

If clergy cannot identify SMI, it is likely they will not make referrals to appropriate mental health providers (Farrell & Goebert, 2008; Pickard, 2012). With more information about the MHL of clergy, trained mental health counselors may be able to initiate interprofessional dialog, bidirectional trainings, and referral partnerships with local clergy (Sullivan et al., 2013). Additionally, knowledge about clergy MHL may aid in current social change efforts to utilize clergy in reducing current mental health care disparities experienced by marginalized populations (Snowden, 2012). Information about clergy's MHL may also assist counselor educators in preparing counseling students to

collaborate more effectively with their local clergy and advance these social change initiatives (Cashwell & Watts, 2010). From an ethical standpoint, research on clergy's MHL is warranted so that counselors and counselor educators may facilitate effective clergy partnerships, which has been advocated in the American Counseling Association's (ACA) multicultural competencies (Sue, Arredondo, & McDavis, 1992), muliticultural and social justice competencies for counselors (MCSJCC) (Ratts, Singh, Nassar-McMillan, Butler, & McCullough, 2015), and Association for Spiritual, Ethical, and Religious Values in Counseling's (ASERVIC) spiritual competencies (Cashwell & Watts, 2010). This study will address the current gap in knowledge about clergy's MHL so that informed counselors and counselor educators can attend to the documented problem of clergy members' low rates of referral to MHPs (Farrell & Goebert, 2008; Openshaw & Harr, 2009; Pickard, 2012; Polson & Rogers, 2007; Standford & Philpott, 2011).

In this chapter, I present the major components of this dissertation study. In the background section, I provide an overview of current MHL studies, the key variables found to predict MHL, and the MHL of clergy as related to their referral behaviors. Following the background discussion, I introduce the problem statement, purpose, and research questions and hypotheses of the study. In these sections, I focus attention on a gap in the research with particular emphasis on mental health care disparities, social justice concerns, and the use of clergy-MHP partnerships to reduce these disparities.

Background

Rooted in health literacy studies, MHL studies attend to the extent to which individuals recognize mental illness and seek appropriate help (Jorm, 2012). Anthony

Jorm (2012) pioneered the study of MHL in Australia nearly 20 years ago. He and his colleagues defined the construct of MHL as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (Jorm, Korten, Jacomb, Rodgers, & Pollitt, 1997, p. 182). These seminal researchers created and utilized vignette case studies to test MHL. The vignette method has since become commonplace in MHL research across many countries (Burns & Rapee, 2006; Cotton,Wright, Harris, Jorm, & McGorry, 2006; Jorm et al., 1997; Lauber, Nordt, Falato, & Rossler, 2003; Reavely & Jorm, 2012; Yoshioka, Reavely, Hart, & Jorm, 2014). In conjunction, researchers consistently showed that recognizing the seriousness of mental health symptoms promoted the use of formal MHPs including psychiatrists, psychologists, and professional counselors.

Until recently, researchers relied on the vignette case study method to measure MHL (O'Connor, Casey, & Clough, 2014). O'Connor et al. (2014) critiqued the vignette method by citing the need for a psychometrically sound, brief, and easily-administered measure of the MHL construct. In their discussion, they argued the importance of MHL for improving access to appropriate treatment, as well as the need to meausre MHL among different population-types so that trainings may be implemented where learning needs become apparent. Furthermore, O'Connor et al. (2014) questioned whether MHL was a unified theoretical concept or a set of separate constructs. With several rounds of pilot testing and statistical analyses, they produced and published a new parametric instrument, the Mental Health Literacy Scale (MHLS), in order to provide data points for robust quantiative statistical analysis (O'Connor & Casey, 2015).

In fitting with previous MHL research findings, O'Connor and Casey's (2015) testing of the new scale-based measure provided psychometric evidence supporting the validity of MHL as a singular construct. More specifically, researchers showed that MHL reflected the following combination of factors: "the ability to recognize disorders," "knowledge of where to seek information," "knowledge of risk factors and causes, "knowledge of self-treatment," "knowledge of professional help available," and "attitudes that promote recognition or appropriate help-seeking behavior" (O'Connor & Casey, 2015, p. 3). These six factors shape the construct of MHL and provide the basis for testing links between various aspects of MHL as they relate to the overall MHL rates of diverse populations. Data from scale-based measures of MHL may inform and justify the use of educational programs for increasing MHL and related help-seeking behaviors in areas currently manifesting mental health care disparities (O'Connor & Casey, 2015).

Regarding current MHL research, findings from epidemiological studies have consistently shown that demographic variables (e.g., age, gender orientation, geographical location, and race/ethnicity) and educational variables (e.g., years and type of training) impacted MHL rates of participants from the general population (Druss et al., 2011; Mojtabai et al., 2011; Wang et al., 2005). More specifically, these epidemiological research results revealed correlations between the variables of older age, female gender orientation, rural location, and minority ethnic/racial status with lower rates of MHL. Such data informed the rationale for this study and the investigation of demographic and educational variables as potential predictors of rates of MHL.

Researchers have identified low MHL as a key reason for the expansive mental health care disparities in the United States (Kirchner, Farmer, Shue, Blevins, & Sullivan, 2011; Pescosolido, 2013; Snowden, 2012). Therefore, social justice researchers have begun to investigate MHL among diverse populations (Lopez, Barrio, Kopelowicz, & Vega, 2012; Snowden, 2012; Sue, Cheng, Saad, & Sue, 2012). Because of the studies on MHL and concomitant disparities, policy-makers and researchers have discussed the need for educating healthy individuals who can encourage those with SMI to seek appropriate mental health services. To that end, clergy commonly emerge as vital providers of mental health first aid in communities with low MHL (Lopez et al., 2012; Mills, 2012; Snowden, 2012). In their meta-analysis research, Oppenheimer, Flannelly, and Weaver (2004) described clergy as the "gatekeepers" between individuals experiencing mental illness and the formal mental health care system (p. 155). Clergy are regularly the first point of contact for those in the beginning stages of SMI (Stanford & Philpot, 2011). Therefore, understanding clergy's MHL remains a necessary first-step toward assessing their capacities to assume the gatekeeping role. However, few researchers have examined the MHL rates of Christian clergy in the United States who provide spiritual leadership and support to the 71% of US residents who profess the Christian faith (Pew Research Center, 2015).

Most studies addressing the MHL of clergy were conducted in countries other than the United States (James, Igbinomwanhia, & Omoaregba, 2014; Leavey, Loewenthal, & King, 2007; Noort, Braam, van Gool, & Beekman, 2012) or among non-Christian clergy in the US, such as imams (Ali, Milstein, & Marzuk, 2005; Ali &

Milstein, 2012) and rabbis (Milstein, Maneire, Sussma, & Bruce, 2008). These researchers have consistently shown that clergy can identify some of the more serious mental illnesses, but often lacked the training and literacy to recognize the severity of presenting symptoms and concomitant need for timely referral to MHPs. Clergy participants in these studies also expressed the desire for additional training and referral oppoortunities to ensure their parishioners received adequate help (Ali et al., 2005; Ali & Milstein, 2012; James et al., 2014; Leavey et al., 2007; Milstein et al., 2008).

Regarding research specific to Christian clergy, data from other countries have provided evidence of moderate MHL in developed nations. In their study of clergy and MHPs, Noort et al. (2012) found that Christian clergy in the Netherlands showed equivocal abilities in detecting spiritual problems when compared to formal providers. However, clergy identified psychiatric illness as serious and requiring professional assistance at significantly reduced odds. Compared to MHPs, clergy were 17% more likely to label SMI (i.e., major depression and psychosis) as a religious problem (OR = .170, $x^2 = 25.7$, $p < .001$) and 8.9% less likely to identify the problem as requiring formal mental health care ($OR = .886$, $x^2 = 27.4$, $p < .001$). Potentially, this underrecognition of the seriousness of mental illness can result in poor outcomes for those relying on clergy assistance (De Hert et al., 2011; Noort et al., 2012).

Fitting with the results from earlier studies on non-Christian clergy's MHL (Ali & Mistein, 2005; Milstein et al., 2000), Noort et al. (2012) also found that clergy required additional training to meet the mental health needs of their parishioners. Additionally, they called for research targeting the following topic areas: (a) the constuction of

interprofessional collaborative models using mental health liaisons, (b) the clergy training required for identification of referrals for symptoms of prolonged grieving, (c) comparative impact of denominational affiliations (e.g., liberal, conservative beliefs) on clergy responses to mental health needs, and (d) those issues most neglected by clergy (e.g., issues of sexuality, abuse). Few robust quantiative studies like Noort et al.'s (2012) have been identified for Christian clergy in the United States, showing both a current gap in the literature base and a framework for future inquiries. Noort et al. (2012), with Ali and Mistein (2005), and Milstein et al. (2000) provided a sound theoretical and methodological basis for testing MHL among clergy participants across diverse denominations.

Thus far in the current literature, I have found only three studies focused on examining Christian clergy from the United States and their ability to recognize mental illness (Chevalier et al., 2015; Pillion et al., 2012; Stansbury et al., 2010). Stansbury et al. (2010) utilized qualitative methods to reflect on African American clergy's interactions with older parishioners presenting with symptoms of alzheimer's desease (AD) (Stansbury & Schumacher, 2008). The results of this study demonstrated that eight out of nine adequately recognized AD and highlighted the need for increasing investigation into MHL needs of rural African American clergy. Investigating clergy as front-line mental health workers to veterans, Chevalier et al. (2015) found that clergy members demonstrated moderate MHL with regard to suicide and depression, but limited MHL with regard to posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI). Pillion et al. (2012) collected data from 48 Catholic priests in North Carolina who

reported willingness to refer case studies depicted in the given vignettes to formal providers. In these three studies researchers examined the MHL of fewer than 200 clergy across the United States and used primarily qualitative measures. Although the collective results of these studies pointed to the need for additional MHL training for clergy, further research must be pursued in order to understand how better to prepare clergy for their work with parishioners who require clinical attention.

A review of these three identified studies demonstrated that clergy understand general mental health issues but do not feel fully prepared to recognize or treat SMI (Chevalier et al., 2015; Pillion et al., 2012; Stansbury et al., 2010). Furthermore, researchers have cited that fewer than 10% of clergy participants recognized the presented symptoms of SMI as serious enough to warrant referral to formal mental health care services (Farrell & Goebert, 2008; Pickard, 2012; Polson & Rogers, 2007; Sullivan et al., 2013). These low referral rates point to a need for increasing MHL, especially those components of MHL related to knowledge about effective and appropriate treatment options (Jorm, 2012). In response to this need, researchers challenged MHPs to support clergy in their gatekeeping role via offering training and educational opportunities (Farrell & Goebert, 2008; Pickard, 2012; Polson & Rogers, 2007; Sullivan et al., 2013).

In regard to clergy referral patterns and interprofessional training and collaboration efforts, Thomas (2012) tested the following five variables as predicting clergy referrals to MHPs: academic education, interprofessional education, teamwork and communication skills, interprofessional trust, and interprofessional collaborative practice. The multiple

regression model demonstrated that 22% of the total variance was predicted by the variables (adjusted $R^2 = .25$, SE = 2.16 , $p < .05$). However, stepwise regression further showed that most of the variance was explained by the education-related variables (adjusted $R^2 = .19$, $p < .05$). The results of this study pointed to educational variables as the strongest predictors of interprofessional collaboration and referral. This finding also fits into the findings and recommendations of previous MHL researchers who conducted studies among the general population (Reavely, Morgan, & Jorm, 2014) and divinity students (Ross & Stanford, 2014). Collectively, these researchers have indicated a significant relationship between educational variables and clergy MHL, a finding on which I will propose variables and hypotheses for this dissertation research.

In regard to educational variables, Polson and Rogers (2007) found that approximately 71% of clergy admitted to unpreparedness in the counseling role. Payne (2013) concurred that over 70% of surveyed clergy desired additional MHL training. In their qualitative exploration, Montesano, Layton, Johnson, and Kranke (2011) examined clergy from a small sample of American clergy. Clergy participants described the need for additional training needs with 60% asking for general mental health information and best-practice treatment options (Montesano et al., 2011). Participants also nominated (a) finding mental health professionals and (b) having shared beliefs systems with those providers as key needs for increasing MHL and referral behaviors. Although the small sample size and geographic area limited the generalizability of the findings, data showed that these clergy desired additional trainings in MHL. These authors also found that clergy more often seek training from MHPs rather than the reverse pattern. Thus,

bidirectional training and collaboration models emerged as potentially important aspects of enhancing trust between professionals.

Given that clergy are not formal MHPs, their lack of training in MHL is not unexpected. However, the current state of mental health care disparities among minority populations has positioned clergy as key social justice partners for increasing access to formal mental health treament (Snowden, 2012). Whether they embrace this role, clergy will likely remain a first point of contact for for millions of Americans suffering with mental health issues (Pickard, 2012; Pillion et al., 2012; Sullivan et al., 2013). Therefore, clergy acting as conduits to the mental health care system have become a focal point for policy makers and social justice researchers who highlight that ethnic and racial minorities seek mental health assistance from clergy more often than from MHPs (Lopez et al.., 2012; Snowden, 2012; Sue et al., 2012).

In relation to mental health care among marginalized groups, Mills (2012) used the response data of 102,749 participants to measure the differences of mental health use (traditional, uncoventional [e.g., alternative or parochial], or psychotopic) among Caucasian/White, African/Black, and Hispanic/Latino populations. Overall, after controlling for various factors (e.g., sex, age, severity of mental illness), African/Black and Hispanic/Latino participants were both statistically less likely than Caucasian/White participants to use any mental health care services, except for parochial. Data also showed that both minority groups sought parochial care at 30% greater likelihood than their Caucasian/White counterparts (OR = 1.30 [African/Black] and 1.29 [Hispanic/Latino], $p < .001$). These researchers amassed data from a large and diverse

cross-section of the population, thereby substantiating a need to address parochial care in diverse areas of the United States. Furthermore, Mills (2012) challenged future researchers to investigate reasons for this phenomenon and whether parochial care could provide linkages to evidenced-based services in efforts to reduce disparities. This study represented a scientifically-based argument for secular investigation of how to leverage the influence of clergy providers as potential resources for reducing current mental health care disparities in communities of color in the United States.

Regarding mental health disparities among ethnic minority populations, Chatters et al. (2011) added important knowledge about the predictors of seeking assistance from clergy providers. They found that African/Black participants not only sought, but also preferred, clergy assistance with serious mental health issues, with the variables of Pentecostal denomination, female gender, and older age showing significant relationships with this preference. In this study, Chatters et al. (2011) provided a comprehensive review of mental health care disparities and discussed the significance of demographic variables in predicting the use of clergy as mental health providers. Other ressearchers have also shown demographic characteristics as predictors of MHL among ethnically and racially diverse communities (Lopez et al., 2012; Mills, 2012; Snowden 2012; Sue et al., 2012), but such studies have rarely focused on the characteristics and MHL of the clergy serving as front-line mental health care providers in these communities.

Researchers have shown the need for clergy to partner with MHPs in order to bridge the gap between communities of color and the formal mental health care system (Chatters et al., 2011; Mills, 2012). Additional researchers concurred and called policy makers to

focus on supporting and preparing clergy in ethnically and racially diverse communities to serve as conduits between help-seekers and the formal mental health care system (Alegria et al., 2014; Lopez et al., 2012; Snowden et al., 2012; Sue et al., 2012). If clergy do not recognize mental illness, however, they may not promote or refer parishioners to formal providers (Farrell & Goebert, 2008; Pickard, 2012). Therefore, a need for the investigation of clergy MHL as the precursor for making appropriate referrals has become manifest (Farrell & Goebert, 2008; Polson & Rogers, 2007; Thomas, 2012). A review of the recent literature, however, showed that MHL research involving clergy participants is lacking.

Although clergy and MHPs have agreed on the need for increasing interprofessional collaboration and referral partnerships (Farrell & Goebert, 2008; Polson & Rogers, 2007; Thomas, 2012), few studies have examined whether clergy recognize when such referrals become vitally necessary. Thus, I have identified a gap in the literature involving clergy and MHL. A review of MHL research on nonclergy participants showed that demographic and educational variables impacted MHL rates (Jorm, 2012; Mojtabai et al., 2011; Montesano et al., 2011; Reavely et al., 2014; Thomas, 2012), yet clergy participants remain largely underinvestigated. With this dissertation study, I will attend to this gap in understanding by examining both demographic and educational variables in relation to the MHL of clergy participants. The results may provide counselors and counselor educators with the information they need to build collaborative relationships and referral partnerships with clergy who serve as conduits to the mental health care system for millions of help-seekers currently without formal care. Additionally, the

results of this study may support social justice research efforts aimed to reduce mental health care disparities among minority communities.

Problem Statement

Researchers have shown that clergy might not refer their help-seeking parishioners to formal MHPs as often as they claimed was necessary (Farrell & Goebert, 2008; Polson & Rogers, 2009; Sullivan et al., 2013). Proposed explanations for nonreferring behaviors included (a) interprofessional distrust between clergy and MHPs, (b) clergy's low MHL, (c) existence of stigma, and (d) contextual barriers (e.g., lack of resources) (Moran et al., 2011; Sullivan et al., 2013). Few researchers, however, have explored clergy's MHL in relation to their referral behaviors. This gap in knowledge is problematic for millions of U.S. residents who rely on clergy for their mental health care needs and may receive inadequate treatment and referral responses (Farrell & Goebert, 2008; Openshaw & Harr, 2009; Pickard, 2012; Sullivan et al., 2013).

Under the conceptual framework of MHL, investigation of clergy's MHL rates would be the first and most important step in determining why clergy do not refer cases of SMI to formal MHPs (Jorm, 2012). Given the lack of information on clergy's MHL, however, researchers cannot hypothesize or establish the extent to which MHL affects referral behaviors. This gap in the research remains problematic to the MHPs and policy-makers attempting to reduce mental health care disparities through clergy linkages to the formal mental health care system (Snowden, 2012). Furthermore, negative mental health outcomes may emerge for those individuals who rely on untrained clergy for assistance and referral to appropriate mental health care (De Hert et al., 2011; Snowden, 2012).

Regarding social justice concerns, the lack of information about clergy's MHL may profoundly affect communities of color who prefer clergy providers rather than formal MHPs (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012). Therefore, this research attends not only to a gap in the research but also to a vital area of social justice.

Understanding clergy's MHL in relation to various demographic and educational variables may provide counselors and counselor educators with the information they need to improve interprofessional trainings and referral partnerships with local clergy (Sullivan et al., 2013; Thomas, 2012). As indicated in ACA's multicultural competencies (Sue et al., 1992), MCSJCC (Ratts et al., 2015), and ASERVIC's spiritual competencies (Cashwell & Watts, 2010), counselors and counselor educators must learn to collaborate with local clergy in order to provide culturally sound and spiritually-aware services. Given the lack of research into clergy's MHL, counselor educators may not have the tools to adequately prepare students to form such collaborative relationships in their future practices (Reiner, Dobmeier, & Hernandez, 2013; Robertson, 2010). This study attended to the current gap in understanding clergy's MHL so that informed counselors and counselor educators may more effectively address the documented problem of clergy's low rates of referral to MHPs (Farrell & Goebert, 2008; Openshaw & Harr, 2009; Pickard, 2012; Sullivan et al., 2013).

Purpose

The purpose of this quantitative, cross-sectional survey research was to investigate the MHL rates of Christian clergy across the United States and to help bridge the gap in understanding clergy's collaboration and referral behaviors. According to the

theoretical framework of the behavioral model (Andersen, 1968, 1995), certain predisposing variables can affect MHL rates. Using the behavioral model as the framework for this study, I explored whether extant demographic variables predicted rates of MHL. Using the Mental Health Literacy Scales (MHLS) (O'Connor & Casey, 2015), I measured clergy's ability to accurately (a) label various mental health disorders, (b) identify where to find help, (c) recognize risk factors and causes, (d) understand appropriate self-help methods, (e) recognize types of professional help, and (e) exhibit the attitudes that promote help-seeking behaviors (O'Connor & Casey, 2015). The results may inform counselors and counselor educators about the current MHL of clergy; furthermore, by relating MHL with various predictor variables, counselors and counselor educators might gain knowledge regarding how to establish and improve interprofessional trainings and referral partnerships.

Guided by the behavioral model theory, I analyzed the following variables as potential predictors of clergy MHL via a demographic questionnaire: denominational affiliation, age, gender orientation, geographical location, and training and educational factors. These clergy characteristics were the predictor variables and the rate of MHL was the outcome variable for this quantitative investigation. Results of the study showed the rates of clergy members' MHL and may aid in defining the context in which counselors and counselor educators may best establish referral partnerships in their communities.

Research Questions

Research Question 1: Is there a significant difference in mental health literacy scores, as measured by the MHLS (2015), among Christian clergy of different denomination-types?

$H_0$1: There are no significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 = \mu 2 = ... = \mu k$

$H_1$1: There are significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 \neq \mu 2 \neq ... \neq \mu k$

Research Question 2: To what extent, if at all, do educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0$2: Educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), do not predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1$2: At least one of the predictor variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of

mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H1: At least one $\beta 1 \neq 0$, $p \leq .05$

Research Question 3: To what extent, if at all, do demographic variables (*age, gender orientation, geographical location*) predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0 3$: Demographic variables (*age, gender orientation, geographical location*) do not predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1 3$: At least one of the predictor variables (*age, gender orientation, geographical location*) predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H1: At least one $\beta 1 \neq 0$, $p \leq .05$.

Framework

I positioned my study among the conceptual frameworks of the MHL research and behavioral model theories. As first defined nearly 20 years ago, MHL is the ability to (a) identify symptoms of mental illness, (b) seek information about mental illness and understand the etiology of the concerns, (c) recognize appropriate help seeking behaviors and professionals, and (d) seek treatment in a timely manner (Jorm, 2012). Since the earliest MHL inquiries (Jorm et al., 1997), researchers have consistently found that the recognition of SMI predicted positive help-seeking behaviors and resulted in improved mental health outcomes (Jones, Cassidy, & Heflinger 2012; Lauber, Ajdacic-Gross,

Fritschi, Stulz, & Rössler, 2005; Reavley & Jorm, 2011a; Wright, Jorm, & Mackinnon, 2012). Therefore, MHL is not only a construct, but a conceptual foundation, by which researchers have since tested and related various levels of MHL to (a) recognition rates of mental illness, (b) help-seeking behaviors and attitudes, (c) symptom reduction, and (d) stigma (Coles & Coleman, 2010; Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Pickard, 2012; Wright et al., 2012; Yap, Reavley, & Jorm, 2012).

Previous researchers frequently relied on Reavley and Jorm's (2011b) vignette-based instrument as one of the few options for measuring MHL. Citing the importance of MHL to early detection, treatment, and healing of mental illness, O'Connor and Casey (2015) created a scale-based measure of MHL that supports earlier conceptualizations of the construct by incorporating six different elements of the construct. These six factors include the (a) ability to recognize mental illness, (b) awareness of how to access accurate information, (c) recognition of risk factors and causes (d) familiarity with appropriate self-help measures, (e) knowledge of appropriate helpers, and (f) attitudes that promote application of help-seeking strategies (O'Connor & Casey, 2015). When examining these six elements, researchers found that the proportion of variance explained by different factorial configurations was low (factor loads between .166-.239), thus supporting a univariate structure as "statistically and theoretically appropriate" (O'Connor & Casey, 2015, p.3). As a result, their validity analyses provided evidence of MHL being a singular conceptual construct. To that end, I operationalized the outcome variable, MHL rates, according to this conceptual definition and utilized the MHLS (O'Connor & Casey, 2015) to collect the data.

To delineate the most relevant predictor variables to test in this study, I used Andersen's original behavioral model (1968) and revised behavioral model (1995), which list predisposing, enabling, and need-based factors associated with health literacy. A legacy of health literacy research showed that the following predisposing factors significantly impacted health literacy rates: age, gender orientation, culture, educational components, and geographical context (Anderson & Newman, 2005; Goodwin & Andersen, 2002; Philips, Morrison Andersen, & Aday, 1998; Pescosolido et al., 1998). Other researchers have utilized the behavioral model to hypothesize and examine help-seeking behaviors concerning mental illness in the general population (Pescosolido et al., 1998; Sharp, Hargrove, Johnson, & Deal, 2006; Pescosolido, 2013). In the few MHL studies specifically involving clergy (Chevalier et al., 2015; Milstein et al., 2000; Noort et al., 2011), denominational type has also been proposed as a predisposing factor impacting MHL rates. This inclusion is appropriate due to the linkages found between culture and denominational affiliation (Brunn, 2015; Caroll, 2002). In using the theoretical framework of the behavioral model, I examined the MHL rates of clergy participants in relation to the statistically significant factors identified in earlier research. I develop the discussion about the conceptual framework of MHL and the behavioral model theories in chapter two.

Nature of the Study

This study was a quantitative, cross-sectional survey research design. I used analysis of variance (ANOVA) to determine whether significant differences in MHL rates occur between clergy of different denominational groups. I also employed multiple

linear regression analyses to explore which, if any, predisposing characteristics (i.e., the predictor variables) predicted higher MHL scores (i.e., the outcome variable). Threats to internal validity related to the study's lack of probability random sampling, control group, and manipulation of the independent variable (Creswell, 2013; Campbell, Stanley, & Gage, 1963). Therefore, I was not be able to determine causal relationships between the variables (Campbell et al., 1963; Podskahoff, MacKenzie, & Podskahoff, 2012). Because researchers cannot investigate predisposing demographic factors under true experimental design, I relied on statistical analyses to offset some of the threats to validity (Frankfort-Nachmias & Nachmias, 2008; Podsakoff et al., 2012). Given the potential relevance of this study to actual clergy practices, an advantage of using the cross-sectional design was the external validity resulting from an investigation of participants in their natural settings, as found by methodologists (Chang & Krosnick, 2009; Evans et al., 2015; Wright, 2005).

Since online surveys provide a more feasible means of collecting data from a large cross-section of clergy, I utilized a computer-administered survey questionnaire (CASQ) (Ward, Clark, Zabriskie, & Morris, 2012; Wright, 2005). Using Survey Monkey (Survey Monkey, 2016), I collected data via web-based methods. In the first electronic mail (email) invitation, I detailed informed consent processes, the general purposes of the study, and additional consent policies (ACA, 2014; Millar & Dillman, 2011). I also provided a direct link to the survey, a one-step clicking process proposed by Millar and Dillman (2011) for significantly increasing survey response rates. After confirming

participation via the informed consent document, participants completed the demographic questionnaire, followed by the MHLS (O'Connor & Casey, 2015).

Using an online database of Christian church directories with over 109,000 clergy contacts to identify potential participants, I randomly selected Christian clergy from across the US who have active email addresses. By using the CASQ method, I attempted to give participants time to respond anonymously to the survey in order to reduce social desirability biases and increase response rates, as were two cited advantages of using CASQ methods in previous studies (Chang & Krosnick, 2009; Ward et al., 2012; Wright, 2005). However, researchers have also debated about the potential limitations of using the CASQ method. Significant findings included concerns with self-selection and coverage bias, as well as higher rates of non-response error (Millar & Dillman, 2011; Ward et al., 2012). Therefore, I used additional strategies suggested by Millar and Dillman (2011) in order to increase participation and reduce potential biases. These strategies included (a) personalizing the web-based invitation, (b) using an .edu email address, (c) sampling large numbers of potential respondents (Millar & Dillman, 2011).

Definitions

As I reviewed the literature, I found scholarly consensus regarding the definitions of several constructs in my study. The following definitions provided the framework by which I explored and investigated the MHL of clergy:

Mental health literacy: The ability to accurately (a) label various mental health disorders, (b) recognize risk factors and causes, (c) seek information regarding mental illness, (d) understand appropriate self-help methods, (e) understand appropriate

professional help, and (d) identify the attitudes that promote positive help-seeking behaviors (Jorm, 2012; O'Connor & Casey, 2015). The outcome variable in this study was the rates of MHL, as measured by the MHLS (O'Connor & Casey, 2015).

Denominational affiliation: Grouping categories according to religious beliefs and behaviors made distinct by the group's doctrinal adherence, religious texts used, and historical traditions (Noort et al., 2012; Payne, 2009; Pickard, 2012). Depending on the defining criterion, the range of denominational categories can be narrow (four categories) to broad (over 1000) (Pew Research Center, 2015). For the purposes of this study, I chose to delimit the type of denomination by using broad categories of the four most populous Christian denominations, as indicated the epidemiological research base (Pew Research Center, 2015). Each of the four categories separately represents at least 5% of the US population and included the following named religious traditions: Evangelical Protestant, Mainline Protestant, Historically Black Protestant (National Baptist Convention), and Catholic.

Age: Number of years since biological birth, measured in whole number (Druss et al., 2011; Jorm, 2012; Mojtabai et al., 2011; Wang et al., 2005).

Gender identity: "One's sense of oneself" as impacted by biological sex (e.g., according to chromosomes and reproductive genitalia) and interpreted by the individual (American Psychiatric Association [APA], 2011, p.1).

Geographical location: Physical area of residence defined according to the number of inhabitants residing in a given locality (Druss et al., 2011; Jorm, 2012; Mojtabai et al., 2011; Wang et al., 2005). Urban areas are those localities with greater

than 50,000 residents and rural areas are those localities with less than 50,000 (US Census Bureau, 2015).

Educational status: The completed years (in whole number) of post-secondary school and degree-level (less than high school/GED, high school/GED, associates, bachelors, masters, doctoral) (Pescosolido, 2013; Philips et al., 1998; Noort et al., 2002; Payne, 2012; Pickard, 2012).

Degree-type: The type of learning capacities obtained and whether schooling involved predominantly psychological studies (mental health), religious studies (divinity), or neither (other) (Ross & Stanford, 2014; Thomas, 2012; Yamada et al., 2012).

Clinical mental health (MH) training course: *any* course, seminar, or instructional program where the primary topic of study addressed knowledge, assessment, or treatment of mental health disorders (Ross & Stanford, 2014; Thomas, 2012; Yamada et al., 2012).

Christian clergy: Vocational category of professionals who serve churches in "leadership roles, often serving concurrently as religious visionary, authoritative spokesperson for their tradition, professional pastor, and organizational administrator overseeing the demographic growth and viability of the religious community" (para. 1) (Hartford Institute for Religion Research, 2015). Christian clergy further describes the individual's use of the canonized Bible and faith Jesus Christ as the foundation for providing leadership, guidance, and oversight to a group of spiritual seekers (McMinn et

al., 2010; McMinn, Ruiz, Marx, Wright, & Gilbert, 2006; Tanner, Wherry, & Zvonkovic, 2013).

Assumptions

For this dissertation study, I assumed accuracy in some aspects that I could not demonstrate to be true due to the web-based administration of the survey. I assumed that the clergy participants willingly volunteered for the study and that their willingness did not reflect any bias, impairment, or agenda on their part (Ward et al., 2012). I assumed that the participants answered questions truthfully and to the best of their ability given the online administration. Additionally, I assumed that the demographic questionnaire and MHLS (O'Connor & Casey, 2015) offered accurate measures of the predictor and outcome variables under unseen testing environments.

Due to the heterogeneity of the credentials and roles of Christian clergy and inability to demonstrate actual clergy membership, I also assumed that participants were active clergy members in Christian churches in the US. With the ethical mandate to maintain the anonymity of the participants (ACA, 2014), I could not verify participants' credentials, roles, or attitudes. In the context of studying a sample of Christian clergy from diverse locations via web-based administration, I could not avoid these assumptions. After thoroughly researching the suitability of the instruments and demographic items, I posited that these assumptions were not haphazard and satisfied the demands of social science research standards (Creswell, 2013). Furthermore, the use of a large sample size offset any potentially purposeful inaccuracies (Field, 2013).

Because I analyzed the data using ANOVA and multiple linear regressions, I briefly detail how I tested the statistical assumptions related to the general linear model. . First, I checked for missing data points and the linearity of the relationship between the variables (Field, 2013). Although prior MHL research showed linearity, I tested for this assumption by analyzing a graph of the data points (Jorm, 2012). I also assumed that the residuals demonstrated independence, constant variance (homogeneity of variance), and normal distribution. To test for normality, I used histograms, Probability-Probability (P-P) plots, quartile-quartile (Q-Q) plots; furthermore, I divided skewness/kurtosis by the standard errors to ensure that no values were large than the absolute value of 2 and within the three standard deviations range (Field, 2013). For the ANOVA analysis, I conducted Levene's test to check the null hypothesis that the differences between the variances are statistically equal (Field, 2013). For the multiple linear regression, I also tested for homogeneity of variance by conducting a Levene's test for equality and Durbin-Watson to test for independence of errors (Field, 2013). Additionally, I conducted correlation analyses to ensure that no multicollinearity emerged in the data (Field, 2013). I describe the results of these tests and limitations in the results section and final discussion.

Scope and Delimitations

I delimited the sample for this dissertation study to include only *Christian* clergy in the US. Although the term *clergy* also includes Imams, rabbis, gurus, and other religious leaders, this study focused on Christian clergy due to their large influence in the US and comparative lack of data regarding their MHL (Hartford Institute of Religion, 2015; Pickard, 2012). Surprisingly, researchers have investigated the MHL of imams and

rabbis, even though these non-Christian clergy groups represent less than 1% of the populations' religious preferences (Pew Research Center, 2015). As previously discussed, I identified only a few studies on the MHL of Christian clergy, and most of these other researchers examined clergy data from outside the US (Lauber et al., 2005; Noort et al., 2012; Yoshioka, Reavley, Hart, & Jorm, 2014). Thus, the choice to delimit the population to only Christian clergy in the US was deliberate and intended to fill a current research gap. In terms of generalizability, the results of this study remain limited to Christian clergy in the US with internet access.

Limitations

After comparing the design and methods of this current study with standards of research (Campbell et al., 1963), I identified several limitations related to internal validity. These limitations involved the methods for sampling, testing and administration, and instrumentation. Regarding participant selection, the use of convenience sampling reduced the level of control required for true experimental design (Campbell et al., 1963). Although convenience sampling increases external validity (Creswell, 2013), the lack of random selection in the total clergy population was a significant limitation. However, due to the lack of uniformity in defining Christian clergy in the US, as highlighted by the Hartford Institute of Research (2015), the current convenience sample remained the most feasible solution to gathering data from a national population of clergy

In regard to testing and survey administration, the results of this study are not comparable to prior studies that utilized in-person or telephone interviews (Campbell et

al., 1963). Furthermore, web-based surveys often result in poor response rates and non-responses bias due to sections of the population not having access or knowledge of web-based communications (Millar & Dillman, 2011). While web-based research has the advantage of efficiently and affordably reaching diverse samples of participants (Meho, 2006; Ward et al., 2012), I identified the testing context and lack of uniformity of the testing environment as threats to the internal validity of this study. Because a goal of this study was to reach a large cross-section of clergy participants, however, I proposed that web-based methods were feasible and appropriate for this study (Millar & Dillman, 2011; Ward et al., 2012). Furthermore, I offset potential biases regarding participant selection by using evidenced-based strategies shown to improve the response rates and accuracy of web-based surveys (Millar & Dillman, 2011; Ward et al., 2012). These strategies included utilizing repeat mailings, personalizing the invitation to participate, and simplifying the length and language of the survey.

Finally, in addressing limitations with instrumentation, the choice of the new scale-based measure, the MHLS (O'Connor & Casey, 2015), presented some limitations. The vignette method is the standard for MHL research and has been found to provide more accurate data than checklist and multiple-choice methods (Peabody et al., 2004). Additionally, the MHLS is a new instrument with a limited number of testing administrations (O'Connor & Casey, 2015). However, the MHLS has thus far demonstrated strong validity and reliability and has the significant advantage of providing parametric data (O'Connor & Casey, 2015). In comparison with using the vignette method, I was able to conduct more robust statistical analysis by using data from

O'Connor and Casey's (2015) scale-based measure. Additionally, researchers can use the results of this dissertation as a point of comparison for future studies utilizing the MHLS (O'Connor & Casey, 2015). In order to address limitations with instrumentation, I examined statistical assumptions and cautiously examined data for potential outliers and inaccuracies (Field, 2013).

Significance

Since Weaver et al. (1996) described clergy as "front-line community mental health workers" 20 years ago, few researchers have examined the MHL rates of clergy (p. 846). This gap in understanding impacts the millions of Americans who rely on clergy for their serious mental health challenges (Chatters et al., 2011; Cho et al., 2009; Jones, Cassidy, & Heflinger, 2012; Kane & Green, 2009). Therefore, the results of this study may inform social justice researchers and counselors as to the viability of enlisting clergy to identify mental illness in their communities, promote appropriate help-seeking, and, in doing so, reduce current mental health care disparities. With insight into clergy MHL rates, counselors and counselor educators can more adequately understand how to (a) support clergy as they work with parishioners, (b) provide interprofessional training opportunities, and (c) improve collaborative and referral partnerships between clergy and MHPs. Overall, the results of this study may inform clergy's MHL training needs and potential opportunities for establishing interprofessional training and referral relationships between clergy and MHPs.

In terms of the significance of this study to the counselor education field, the results of this study may inform current multicultural training curricula regarding

interdisciplinary collaboration and the importance of cooperating with informal helping networks. According to the Council for Accreditation of Counseling and Related Educational Programs (CACREP) 2016 Standards (CACREP, 2015), ACA's Multicultural Competencies (Sue et al., 1992) and MCSJCC (Ratts et al., 2015), and ASERVIC's Spiritual Competencies (Cashwell & Watts, 2010), the responsibility to cooperate and collaborate with indigenous helpers is an ethical mandate for mental health counselors when working among diverse populations. To that end, research has shown that modeling collaborative relationships with clergy partners and providing experiential learning opportunities increased cultural competence in student counselors (Dobmeier & Reiner, 2012; Vogel, McMinn, Peterson, & Gathercoal, 2013). However, these learning strategies are largely absent from the counselor education curricula and remain under-studied in the counselor education research (Dobmeier & Reiner, 2012; Shaw, Bayne, & Lorelle, 2012). The results of this study may inform the current multicultural curricula on training approaches for improving clergy-MHP referral partnerships. With increased interprofessional dialog, training, and referrals, these partnerships may have the potential for creating positive social change in reducing the current state of mental health care disparities (Aten et al., 2013; Snowden, 2012).

Summary

Substantial numbers of researchers prescribe the use of clergy to bridge the gap between currently underserved minority populations and the formal mental health care system (Alegria et al., 2014; Aten et al., 2012; Lopez et al., 2012; Snowden et al., 2012; Sue et al., 2012). Clergy members' capacities to fulfill this role, however, requires their

ability to recognize when such referrals are necessary (Jorm, 2012). Currently, targeted investigations of the MHL rates of Christian clergy in the US are lacking, with only three identified studies from the past 10 years (Chevalier et al., 2015; Pillion et al., 2012; Stansbury & Schumacher, 2008). Therefore, not enough information is available to discuss the potential benefits and opportunities for collaborating with clergy as partners in mental health care. Furthermore, the related research into clergy referral patterns suggested that clergy referrals to MHPs are rare and may be due to low rates of MHL (Farrell & Goebert, 2008; Sullivan et al., 2013).

To attend to this gap in understanding clergy MHL as related to their referral patterns, I investigated the MHL rates of a large cross-section of clergy in the US. Relying on the conceptual framework of MHL (Jorm, 2012) and the behavioral model theories (Andersen, 1998), I explored several predictor variables in relation to the MHL rates of clergy participants. These predictor variables included demographic and educational variables that have been found to significantly affect MHL (Pescosolido, 2013). The results may inform counselors and counselor educators how to increase and improve interprofessional training and referral partnerships between clergy and MHPs. Furthermore, the results may fill the gap in understanding clergy MHL so that counselor educators may be prepared to train student counselors to collaborate more effectively with local clergy and, potentially, to reduce mental health care disparities. Next, I present a brief overview of the next chapters of this dissertation study.

In chapter two of this dissertation, I review labeling theory as the precursor to the concept of MHL, which provided the conceptual framework for this dissertation. With a

review of the behavioral model theories, I discuss various demographic and educational variables found to impact MHL rates. Fitting within these theoretical foundations, I review and describe previous MHL studies and their instruments, methods, and findings. Then, I introduce the current research attending to clergy as informal mental health providers alongside pertinent data demonstrating minority populations' preferences for clergy providers. Due to mental health disparities currently found in the formal mental health care system in the US, I argue the significance of this dissertation study in the context of the current literature base. I describe, examine, and assess research attending to the (a) MHL rates of clergy, (b) need for clergy training in MHL, and (c) lacking interprofessional collaboration and referral partnerships between clergy and MHPs. Then, I evaluate the few studies attending to clergy MHL and describe current gaps in the literature. Finally, in chapter two, I review the problem related to this gap in the literature alongside the methodologies of previous studies that I will use to frame this dissertation study.

Chapter 2: Literature Review

In the following literature review, I articulate the need for research attending to clergy's ability to recognize serious mental illness (SMI) and make appropriate referrals. Examining clergy characteristics in relation to their mental health literacy (MHL) rates may have important consequences for large numbers of Americans who rely on clergy for psychological support and counseling (Pargament & Lomax, 2013; Thomas, 2012). For nearly 20 years, researchers have focused on MHL as a key predictor of seeking and receiving effective mental health care (Jorm et al., 1997; Reavley, Morgan, & Jorm, 2014; Wang et al., 2005). For millions of Americans currently not receiving needed mental health services, MHL as a precursor to seeking appropriate services continues to be a vital area of study (Druss et al., 2011). Additionally, mental health care disparities become especially manifest among populations of minority status, findings which raise questions of the differences in MHL perspectives according to diverse populations (Mills, 2012; Snowden, 2012). To that end, minority populations have shown preference for clergy helpers over formal mental healthcare professionals (MHPs) for their psychological needs (Mills, 2012; Snowden, 2012). Therefore, clergy continue to serve as gatekeepers to the formal mental health care system for non-majority groups, making their MHL rates a primary factor in their ability to collaborate with and refer to MHPs (Snowden, 2012).

The concept of MHL inspired the conceptual basis for this dissertation. Mental health literacy researchers position the ability to recognize accurately the symptoms of mental illness as the key predictor variable for identifying and seeking appropriate help-

seeking measures (Jorm, 2012). Findings from MHL research demonstrated significant relationships among types of mental health disorders, help-seeking behaviors, and various cultural phenomena (Jorm, 2012). Previous studies have examined age (Pickard, 2012; Wright et al., 2012; Yap & Jorm, 2012), gender (Cotton et al., 2006; Lauber, et al., 2003), race/ethnicity (Angermeyer, Holzinger, & Matschinger 2009; Bener & Ghuloum, 2011; Yoshioka, Reavley, & Rosetto, & Jorm, 2014), geographical characteristics (Kirchner, Farmer, Shue, Blevins, & Sullivan, 2011), and socioeconomic status (Wang et al., 2005) in relation to MHL. Additional studies have examined the impact of stigma, educational levels, and awareness campaigns on rates of MHL (Jorm, Christensen, & Griffiths, 2006; Wright et al., 2012). The MHL rates of populations most at-risk for living with untreated SMI, as well as those who can promote MHL and referral to MHPs, have also been studied (US Department of Health and Human Services [DHHS], 2001; Snowden, 2012; Wang et al., 2005).

In this literature review, I first review studies establishing the conceptual framework of *mental health literacy* and address the research attending to relationships between MHL and participant characteristics. After discussing the secondary theory for this study, the behavioral models theory, I establish the importance of exploring predisposing variables as predictors of MHL. Then, I review the substantial history and relevance of clergy's serving as informal MHPs, especially for marginalized populations. Additionally, I discuss the literature concerning the potential risks resulting from clergy's inability to recognize and refer cases of SMI to appropriate MHPs, findings that I used to frame the problem statement. Taken together, these studies provided a rationale for the

purpose of the current study, which was to explore and examine the MHL of Christian clergy in the US. After the literature review of MHL and clergy providers, I used the current MHL research to discuss a methodological basis for the current inquiry, as well as the potential limitations involved in studying the construct of MHL.

Literature Search Strategy

For this literature review, I conducted a search through PsychARTICLES, PsychINFO, PsychTESTS, SAGE premiere, socINDEX, Mental Measurements Yearbook, Health and Psychological Instruments, and Academic Search Complete databases, accessed from Google Scholar and Walden University's library via electronic delivery. The key words included in the database search included *clergy, mental health literacy, interprofessional collaboration, mental health diagnosis, mental health illness, mental health disparities, recognize/recognition, religion and spirituality,* and *counselor education.*

Before doing a limited search of the recent literature, I attempted to gain a broad understanding of clergy MHL by using an open date setting in the databases. The results of this inquiry led to a more current search, which I integrate with the prior historical findings. After narrowing the search from the past 15, 10, and then five years, overall trends in the research became apparent. By using weekly update alerts from the Google Scholar search engine, I continued to identify and review newly published research and articles until the final drafting of this study.

Mental Health Literacy: The Conceptual Framework

Before the construct of MHL emerged as a viable and important area of study, other researchers had been investigating the relationships among mental illness, labeling, stigma, and socialization (Link, Cullen, Streuning, Shrout, & Dohrenwend, 1989; Gove, 1982; Perry & Pescosolido, 1998; Scheff, 1974). William Scheff explained the relationships among mental illness, stigma, and labeling in his seminal work on labeling theory (Scheff, 1974). He postulated that labeling and classifying abnormal behaviors as formal diagnoses increased their severity and caused social rejection (Scheff, 1974). The tenets of labeling theory prompted an impassioned debate that centered on the etiology of mental illness. In response to labeling theory, Gove (1982) rejected the causal effects of labeling and posited that the act of labeling mental illness did not instigate sustained negative perceptions. He argued that, regardless of the nominated label, the abnormal behaviors involved in mental illness resulted in stigmatized responses and social rejection (Gove, 1982).

Emerging between these opposing views, other researchers (Link et al., 1989) set forth the proposition that labeling mental illness increased stigmatized responses through the modifying effects involved in various socialization processes. According to modified labeling theory, researchers linked the labeling of mental illness to stigmatization via other pathways, such as negative self-esteem or isolating behaviors (Link et al., 1989). However, since they advanced this modified theory, continued research has demonstrated that labeling theories may not adequately explain the etiology of stigma or define the complexities of stigmatized experiences and processes (Jones, Cassidy, & Heflinger,

2012; Lauber, Ajdacic-Gross, Fritschi, Stulz, & Rossler, 2005; Pescosolido et al., 2010). For example, Link and Phelan (2013) posited that labeling mental illness could have both positive and negative effects, with the key being whether the illness or the person became the object of the label.

Mental Health Literacy

In the midst of this debate regarding the labeling theories, Anthony Jorm and colleagues proposed the basis for the current concept of mental health literacy (MHL) (Jorm et al., 1997). Nearly 20 years ago, these researchers first coined the term *mental health literacy* and reasoned its importance to the overall health literacy research (Jorm et al., 1997, p. 182). The seminal researchers defined MHL as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (Jorm et al., 1997, p. 182). Defined more broadly than labeling, MHL represents the abilities to accurately recognize and understand mental illness, choose positive help-seeking behaviors, and successfully pursue appropriate treatment options (Jorm et al., 1997; Reavley & Jorm, 2011a). In recent MHL research, the accuracy of the label (i.e., linking of a specific grouping of symptoms to their respective diagnostic category), rather than the act of labeling, has become the key experimental variable (Merritt, Tharp, & Furnham, 2014; Reavley, McCann, & Jorm, 2012; Taylor, Lopez, Martinez & Velasco, 2012).

The concept of MHL not only depicts a knowledge of mental illness, but also the mindfulness and understanding of symptoms and treatment options that lead to positive help-seeking behaviors (Jorm, 2012). These behaviors involve the recognition of mental

health problems in conjunction with pursuing or promoting effective help-seeking behaviors from appropriate providers, when necessary (Jacka et al., 2013; Reavley & Jorm, 2012). For nearly 20 years now, MHL researchers have steadily provided evidence that accurate recognition of mental health problems is the necessary precursor to seeking appropriate and helpful treatment. As such, MHL is a dynamic construct rooted in the theoretical tradition of labeling theory, and researchers now use MHL as the conceptual foundation for investigating mental health care disparities (Jorm, 2012).

Measuring Mental Health Literacy

Until recently, the Mental Health Literacy and Stigma Questionnaire, now in the 8th updated version (MHLSQ-8) (Reavely & Jorm, 2011b), has been the main instrument by which to examine MHL. Researchers use the MHLSQ-8 to examine participants' knowledge and beliefs about six mental health disorders, as described in hypothetical vignette case studies. With regard to the vignettes, the instrument includes questions regarding diagnostic accuracy, treatment-seeking preferences, and beliefs about stigma and the helpfulness of various interventions. To measure MHL, instrument creators depicted the symptoms of mental disorders in fictitious case studies based on the criteria taken from the Diagnsotic and Statistical Manual of Mental Health Disorders, Fourth Edition– Text Revision (DSM-IV-TR) (American Psychological Association, 2000), including depression, depression with suicidal thoughts, early schizophrenia, chronic schizophrenia, social phobia, and post-traumatic stress disorder (PTSD). In the vignettes, the symptoms of each of these disorders become manifest via hypothetical case studies of an individual experiencing mental health challenges.

Dozens of studies from around the world have replicated, refined, and utlized this instrument (Burns & Rapee, 2006; Cotton et al., 2006; Jorm, Kelly, et al., 2006; Jorm, Kitchener, Sawyer, Scales, & Cetkoski, 2010; Reavley & Jorm, 2011a; Yap et al., 2011; Yamada, Lee, & Kim, 2011; Yoshioka et al., 2014). The results of these studies supported the conceptualization of the positive links between MHL, help-seeking behaviors, and attitudes. Furthermore, researchers continue to study new and different populations in order to extend current findings and theoretical support for the concept of MHL (Jorm, 2012).

From the conceptual perspective, a strength of the MHLSQ-8 (Reavley & Jorm, 2011b) is its capacity to measure the accuracy of the label as related to treatment seeking, beliefs, and stigma. Using the MHLSQ, researchers from the last 20 years have steadily demonstrated robust links between accurate labels and increased nomination of appropriate help-seeking measures (Jorm, 2012) and reduced stigma (Wright et al., 2012). In the next section, I review these findings using the terms mental illness and SMI when addressing mental health disorders. Because MHL researchers used medical definitions to describe and measure mental health disorders, I also adopted these terms for the dissertation study. The use of these medically-based terms does not negate the philosophical foundation of mental health counseling professionals, who hold to a developmental, preventitive, and strengths-based perspective (Kaplan, Tarvydas, & Gladding, 2014).

Mental Health Litearcy and Treatment Seeking

Only in the past 20 years have epidemiological researchers investigated MHL rates, the results of which show that only a minority of those with mental illness seek treatment, even in developed nations (Dementtenaere et al., 2004; Kessler et al., 2010; Wang et al., 2007). Even in the US, only half of the respondents with SMI had sought treatment, and only half of those had sought evidenced-based treatment (Druss et al., 2011). In another large-scale survey conducted in the US, researchers compared two *National Comorbidity Studies* (NCS; 1993; 2003) and also found low rates of treatment-seeking at 12.2% and 20.1%, respectively (Kessler et al., 2005). Replication studies of these surveys (NCS-R) further found that "low perceived need" was the main barrier to seeking treatment, even over contextual (e.g., cost, access) obstacles (Mojtabai et al., 2011, para. 6). Furthermore, researchers have found that respondents, on average, delayed treatment seeking for eight years from the onset of symptoms (Drancourst et al., 2011; Marshall et al., 2005; Thompson, Issakidis, & Hunt, 2008). Importantly, the delays in treatment resulted in poorer mental health outcomes (Marshall et al., 2005) and, in another study, longer duration of the illness (Drancourt et al., 2013).

According the conceptual framework of MHL research, recognizing mental illness and knowing where and from whom to seek help should lead to help-seeking behaviors (Jorm, 2012; Mojtabai et al., 2011). The reason individuals do not seek or encourage others to seek treatment was found to be largely due to their inability to recognize the seriousness of the presenting mental health problems (Gulliver, Griffiths, & Christensen, 2010; Mojtabai et al., 2011). For example, in one study, participants

reported an average of 9.6 years of "duration of untreated illness" (DUI), taking nearly a decade to recognize that their bi-polar symptoms were serious enough to warrant intervention (Drancourt et al., 2011, p. 1). Researchers posited that increasing the ability to recognize mental illness should, conceptually, lead to improved help-promoting and help-seeking behaviors (Drancourt et al., 2013; Jorm, 2012; Mojtabai et al., 2011; Rosetto, Jorm, & Reavley, 2014; Thompson et al., 2008).

Though knowledge about mental illness has been linked to improved help-seeking behaviors and health outcomes, results from international research have consistently shown that many individuals do not accurately recognize and label mental illness (Coles & Coleman, 2010; Farrer et al. , 2008; James et al., 2014; Swami, 2012; Yoshioka et al., 2014). Low rates of MHL are found in Western cultures as well as in the US. In their study on MHL for anxiety, Coles and Coleman (2010) found that less than half of the US respondents correctly identified panic disorder or generalized anxiety disorder in their respective vignettes. In another MHL study, Sai and Furnman (2013) showed that just 46.4% of US respondents correctly identified schizophrenia from the three presented vignette scenarios. In comparison to schizophrenia, depression was found to be recognized more often (72.7%), a finding which researchers linked to increasingly publicized awareness campaigns for depression literacy (Sai & Furnman, 2013). These findings on MHL campaigns and depression literacy are encouraging; however, other researchers showed that when individuals incorrectly labeled depression as merely a *life problem* or *stress*, they were less likely to seek help (Jorm, Kelly et al., 2006). Therefore, accurate labeling of mental illness, and not just the vague notion of a

potential problem, may be a vitally important to increasing treatment-seeking behaviors and improving subsequent mental health outcomes (Jorm, Kell, et al., 2006; Wright et al., 2012).

Researches have demonstrated that the recognition mental illness significantly relates to improved mental health outcomes (Angermeyer et al., 2009; de Diego-Adelin˜o et al., 2010, Gulliver et al., 2010; Reavley & Jorm, 2011a). Across many studies, researchers have shown that knowledge of appropriate help-seeking behaviors may moderate the relationship between recognition of mental illness and improved outcomes. In the MHL research, mental health clinicians described these effective help-seeking behaviors as seeking timely assistance from mental health counselors, psychiatrists, psychologists, psychotherapists, general practitioners, and social workers via counseling and pharmacotherapy strategies (Reavley et al., 2014; Wright et al., 2012). Ongoing MHL research has consistently shown that accurately recognizing mental illness predicts these positive help-seeking behaviors, which then leads to a reduction of symptom severity and enhanced functionality (Jones et al., 2012; Lauber et al., 2005; Reavley & Jorm, 2011a; Wright et al., 2012).

Because of the the investigated linkages between accurately recognizing mental illness and seeking help, MHL campaigns have begun to increase in number across Asia, Australia, Europe, and the US (Angermeyer et al., 2009; Coles & Coleman, 2010; Farrer et al., 2008, Swami, 2012; Yap et al., 2012). Effective campaigns have involved dissemination of educational information about the risks and warning signs of mental illness as well as appropriate treatment options (Reavley & Jorm, 2011c; Wright, Jorm,

Harris, & McGrorry, 2007). The most rigorously tested campaigns occurred in Australia, Germany, and Norway. In Australia, Jorm et al., (2006) found that a MHL training program increased participants' abilities to recognize depression and nominate evidenced-based treatments as *helpful*. In a later Australian study, researchers also boasted that 1% of their population had received MHL training, which resulted in trainees' abilities to recognize mental illness, reduce their own mental health symptoms, and recommend mental health care treatment to others (Jorm & Kitchener, 2011). Germany's campaigns saw a reduction in suicidal acts and more accurate understanding of the etiology of depression (Helergl & Wittenburg, 2009). In Norway, researchers identified the MHL campaign as the defining factor in reducing untreated schizophrenia (Joa et al., 2008). These findings are preliminary and limited, but also encouraging.

Importantly, one limitation of these findings is the apparent discrepancy that can occur between help-seeking attitudes and help-seeking behaviors (Gulliver, Griffiths, Christensen, & Brewer, 2012). Meta-analysis research on six randomized-controlled trials of MHL interventions and outcomes showed that interventions improved attitudes about mental illness, but did not see significant changes in participants' willingness to seek help (Gulliver et al., 2012). Therefore, even though accurate knowledge about mental illness improved attitudes toward seeking help and reducing stigma, knowledge did not, alone, coincide with actual seeking help-seeking behaviors. This phenomenon suggested that additional mediating factors may be necessary to encourage actual help-seeking behaviors. These findings fit within the framework of earlier researchers who found evidence that those with SMI are more likely to seek help from trained MHPs

when others encouraged them to do so (Gulliver et al., 2010; Yap et al., 2011; Yap et al., 2012). To that end, recognizing the problem may not be enough to prompt help-seeking behaviors; the encouragement and referral of trusted others might also be required.

Mental Health Litearcy and Appropriate Treatment and Provider-Type

In addition to recognizing symptoms of mental illness as the precursor to help-seeking behaviors, MHL also involves knowing where to seek evidenced-base care and most appropriate forms of treatment (Jorm, 2012). Studies have shown that individuals overwhelmingly nominated informal help-givers, such as family and friends, as helpful for reducing mental health problems (Burns & Rapee, 2006; Jorm, Kelly et al., 2006; Yap et al., 2012). Common forms of informal help include assistance from clergy and teachers, who are preferred service-providers for many populations (Jorm et al., 2010; Mills, 2012). While informal helping networks certainly support the healing process (Pescosolido, 2013; Snowden, 2012), issues of SMI require adequate attention by trained professionals (Golomb et al., 2014). Therefore, MHL research not only involves recognition of mental illness as leading to help-seeking behaviors, but also the investigation of the relationship between accurately recognizing SMI and the choice of treatment and provider (Jorm, 2012).

Researchers found that accurate labeling of mental illness relates to the recognition of the most helpful, evidenced-based treatments, treatment providers, and services (Wright et al., 2012; Wright et al., 2007). Furthermore, these studies have consistently shown that labeling mental illness accurately, when coupled with knowledge about effective help-seeking behaviors, improved outcomes and reduced stigma (Wright

et al., 2007; Wright et al., 2012). In a study analyzing the relationship between MHL and help-seeking behaviors, Wright et al. (2012) found that accurately recognizing and labeling depression and schizophrenia from a given vignette case study was significantly associated with the nomination of effective MHPs, which included trained counselors and general practitioners, respectively.

These findings show increasingly significance when symptoms grow more severe. The vignettes depicting SMI with bizarre symptom expression (e.g., delusions) demonstrated higher MHL rates and appropriate help-seeking behaviors when compared to other vignettes depicting symptoms with less obvious presentations (Reavley et al., 2014). Researchers found that major depression, schizophrenia, and suicidal ideation are recognized and treated more often than other mental illnesses with subtler manifestations (e.g., social anxiety disorder, general anxiety disorder) (Burns & Rapee, 2006; Jorm, Kelly, et al., 2006; Wright et al., 2007). Given that the more bizarre and outward presentations of mental illness garner the worry and attention of others, help-seeking behaviors may partly be the result of encouragement by others to seek help. In fact, mental health promotion, or the act of recommending another individual to seek mental health assistance, has become a key goal of mental health first-aid trainings carried out in various communities (Kelly et al., 2011; Kingston et al., 2011; Yap & Jorm, 2011). As such, trainings equip community leaders with MHL skills to identify mental illness and subsequently, recommend and promote best-practice treatment options.

Additional Measures of Mental Health Literacy

In response to a flourish of MHL studies, O'Connor et al., (2014) critiqued the vignette method of inquiry and cited the need for a psychometrically sound, brief, and easily-administered measure of the MHL construct. In their discussion, they emphasized the importance of MHL for improving access to appropriate treatment, as well as the need to measure MHL among different population-types so that trainings could be implemented where learning needs became most apparent. Because the MHL conceptual framework rested primarily on data from vignette case studies, O'Connor et al. (2014) also questioned the validity of the unified structure of the MHL construct.

In response to the identified limitations of previous MHL studies, O'Connor and Casey (2015) conducted a study to review the main elements of MHL in order to craft a valid scale-based measure. Based on the previous two decades of MHL research, they began by defining MHL as the ability to (a) recognize mental illness, risk factors and causes; (b) understand appropriate help-seeking measures; and (c) acknowledge attitudes that promote such recognition and understanding (O'Connor & Casey, 2015). Their *Mental Health Literacy Scale-Pilot-Revised* (MHLS-P-R) consisted of 51 items that inquired about the following: (a) the *"ability* to recognize disorders" (21 items), (b) the *knowledge* of "where to seek information" (4 items), (c) "risk factors and causes" (2 items), (d) "self-treatment" (2 items), and (e) "professional help available," (5 items), and (f) the "*attitudes* that promote recognition or appropriate help-seeking behavior" (17 items), (O'Connor & Casey, 2015, p. 3). More items were dedicated to testing components of MHL deemed most vital (e.g., ability to recognize problems and promote

help-seeking behaviors), as found in previous studies (Jorm, 2012). After rigorous testing via clinical panels and comparative analysis with other scale-based measures of the components of MHL, O'Connor and Casey (2015) published the final 35-item scale, the Mental Health Literacy Scale *(*MHLS).

The itemization of this instrument and resulting psychometric evidence demonstrated the multi-faceted, yet unified, nature of MHL. The results of O'Connor and Casey's (2015) study led to the first scale-based measure of MHL, which I will use for this dissertation study. Their research provided psychometric evidence for how the (a) recognition of mental illness, (b) knowledge of where and from whom to seek help, and (c) beliefs about mental illness coincide as a unified phenomenon, now known as MHL. Their research also provided evidence of the link between recognition and effective treatment seeking from appropriate providers. In using the MHLS (O'Connor & Casey, 2015), I explored and examined the full construct of MHL, which is not only the ability to recognize mental illness, but also the acknowledgement of where and how to receive the most appropriate help.

O'Connor and Casey's (2015) research further established the importance and viability of researching the conceptual framework of MHL. With the introduction of the MHLS, they invited other researchers to test the new instrument among diverse populations, as such research is currently lacking. Therefore, the results of this dissertation study inform the reliability and validity data of the new MHLS (O'Connor & Casey, 2015), in addition to providing lacking data about clergy MHL.

Summary of Mental Health Literacy Research

For nearly 20 years, researchers have defined, challenged, refined, and tested the concept of MHL among various populations and contexts. Not only do MHL researchers position recognition accuracy as the precursor to help-seeking behaviors and reduction of stigma, but also propose that correctly labeling mental illness can lead to seeking help from appropriate mental health providers (Wright, et al., 2012; Yoshioka et al., 2014). With the results of these studies, social justice advocates described the importance of MHL among the general population and promoted research efforts to address the problem of mental health disparities and the concomitant need for conduits between formal MHPs and marginalized populations (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012). Furthermore, they have maintained the importance of examining the construct of MHL among diverse populations and various demographic characteristics (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012).

In summary, MHL researchers have promoted and tested the proposition that high rates of MHL lead to positive help-seeking behaviors, including the identification of the most appropriate mental health treatment professionals. For the purposes of the current dissertation study, this proposition provided a conceptual framework useful for examining whether clergy demonstrated levels of MHL commensurate with their current roles and obligations as gatekeepers to the formal mental health care system. Furthermore, exploration of clergy MHL rates according to various demographic characteristics may inform counselors and counselor educators how to build collaborative relationships and referral partnerships with their local clergy, an interprofessional process

which has been described as an important strategy for reducing current disparities (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012). Additionally, the results of this research may extend the theoretical foundations of MHL by exploring the MHL of clergy populations with a new scale-based measure.

Predictors of Mental Health Literacy: The Behavioral Model

Frequently employed by social psychology researchers to study health literacy, the "medical utilization models" draw upon individual, societal, and systemic factors to measure determinants of health care use (Pescosolido, 2013; Pescosolido et al., 1998, p. 275). Of these models, researchers have used Ronald Andersen's original behavioral model (1968) and revised behavioral model (1995) to study three components of health care use, including predisposing, enabling, and need-based factors. Researchers have also relied on the behavioral model theories to investigate these factors in relation to help-seeking behaviors in order to address mental health disparities (Pescosolido et al., 1998; Pickard & Guo, 2008; Pescosolido, 2013; Sharp et al., 2006). For this study, I chose utilize the behavioral model theories to hypothesize about potential predictors of MHL in order to gain contextual understanding of clergy members' ability to serve as front-line mental health workers.

According to the original behavioral model (Andersen, 1968), predisposing variables of health care usage included demographic variables (e.g., age, gender identity, and geographical location), social factors (e.g., socioeconomic status, culture), and health beliefs and attitudes (e.g., stigma, symptom severity). In the revised behavioral model, these predisposing factors became part of the larger category, "primary determinants,"

into which Andersen (1995) also incorporated systemic variables related to physical, financial, and psychological access to care (p. 7). Actual health-seeking behaviors (e.g., personal health habits and use of health care system) and concomitant treatment outcomes (e.g., both perceived by clients and assessed by professionals) formed the second and third components of the revised model, respectively (Philips et al., 1998). Since this study will not explore these latter two categories (i.e., actual behaviors and outcomes), I will use the original behavioral model to provide the contextual basis for the exploration of demographic variables in relation to MHL.

Predictors of Health Care Literacy and Usage

Using the theoretical foundation of the behavioral models, researchers have consistently found that identified need, older age, female gender, Western cultural heritage, and elevated socioeconomic status predicted higher rates of health care usage (Anderson & Newman, 2005; Goodwin & Andersen, 2002; Philips et al., 1998;; Pescosolido, 2013; Pescosolido et al., 1998). Findings from MHL researchers concurred (Farrer et al., 2008; Kirchner et al., 2011; Mojtabai et al., 2011; Pescosolido, 2013; Pickard, 2012). Results of MHL studies pointed to various demographic characteristics as predictors of MHL through participants' recognition of the need for formal treatment. For this dissertation, I used these findings to form hypotheses about the relationships between clergy's predisposing demographic variables and rates of MHL.

Previous researchers found that contextual, demographic variables did significantly influence health literacy. Studies showed that differences in geographical location (e.g., rural versus urban) resulted in differences in help-seeking behaviors for

both health (Philips et al. 1998) and mental health care, with rural communities showing reduced rates of MHL and use of formal services (Jones et al., 2012; Kirchner et al., 2011). In other studies, higher levels of educational and occupational attainment predicted higher rates of health literacy and help-seeking behaviors (Andersen & Newman, 2005; Goodwin & Andersen, 2002; Reavley et al., 2012). Although researchers did not investigate potential moderating variables in these studies, they demonstrated the importance of investigating geographical, educational, and occupational variables in relation to MHL.

Given the findings from studies utilizing the behavioral model theories, I hypothesized that certain predisposing demographic factors would show significant relationships with the MHL rates of clergy. Drawing from the aforementioned studies, I explored and examined these variables (e.g., age, gender identity, geographical location, level and type of educational attainment) in relation to the MHL rates of clergy participants. Findings may inform current understanding of where and how to support clergy in their role as front-line mental health care workers. Additionally, I tested the underlying propositions of the behavioral model, thereby extending the knowledge base of this theory.

Variables Open to Intervention

As understanding of the determinants of health care use increased, researchers also noted which variables provided ideal opportunities for reducing health and mental health care disparities (Andersen, 1995; Andersen & Newman, 2005; Sharp et al., 2006; Pescosolido, 2013). Researchers posited that many demographic characteristics (e.g.,

age, gender identity, geographical location) are not flexible or easily modified (Sharp et al., 2006; Pescosolido, 2013). Some educational factors, however, do seem amenable to intervention. Researchers identified these more flexible factors as the (a) knowledge to recognize of mental illness symptoms (i.e., MHL) (Reavley & Jorm, 2012; Sharp et al., 2006) and (b) understanding to reduce social stigma (Wright et al., 2012). Researchers have shown that MHL educational programs were associated with improved recognition rates of mental illness and the reduction of stigma (Reavley & Jorm, 2012; Sharp et al., 2006, Wright et al., 2012). While these findings are encouraging, researchers have also documented that increasing MHL may not be enough to increase actual use of formal mental health care services (Griffiths et al., 2012). In fact, researchers showed that many individuals with mental illness will only seek formal help via the encouragement, assistance, and promotion provided by informal helpers and acquaintances (Alegria et al., 2014; Jorm, 2012; Jorm & Kitchener, 2011; Snowden, 2012).

Mental Health Promotion

Mental health literacy campaigns among healthy individuals have been associated with reduced stigmatized responses to mental illness (Wright et al., 2012) and increased "mental health promotion" (Sharp et al., 2006, p. 422). Mental health promotion is the nonprofessional practice of encouraging those with mental illness to seek help from formal MHPs (Sharp et al., 2006, p. 422). Increasing the frequency of mental health promotion among underserved populations may reduce current disparities and, as such, remains the goal of many mental health first-aid campaigns (Jorm & Kitchener, 2011). In the aftermath of Hurricane Katrina, for example, MHPs trained local clergy in rural parts

of Louisiana to offer mental health first aid and promotion to residents in crisis (Aten et al., 2013). The success of this program illustrated how informal clergy providers can become helpers and referral partners among populations whose predisposing demographic characteristics negatively impacted their help-seeking behaviors.

To reduce disparities at the national level, policy makers have begun to identify informal helping providers who can accurately recognize mental illness, promote help-seeking behaviors, and refer those in need to appropriate treatment providers (Alegria et al., 2014; Aten et al., 2013; DHHS, 2001; Lopez et al., 2012; Snowden, 2012). Using the theoretical basis of the behavioral models, however, I hypothesize that these potential referral partners residing in areas with low rates of MHL may likewise show inadequate rates of MHL to become liaisons to formal providers. Therefore, research attending to the MHL rates and training needs of these potential referral sources remains important for effectively applying mental health promotion strategies to the current problem of disparities (Bitanihirwe, 2014).

Summary of the Behavioral Model Theories

The behavioral model provided a theoretical framework by which I assessed the MHL rates of clergy who often serve as conduits to the formal mental health care system. By investigating the relationship between clergy members' predisposing demographic and educational characteristics and MHL rates, I may inform the interprofessional training needs of clergy partners of various ages, gender identities, geographical locations, denominational affiliations, and educational levels and types most in need of intervention. As shown in the research, increasing the MHL rates of the referral partners

in these communities may provide additional layers of social support for those in need of services (Bitanihirwe, 2014). In this dissertation study, I will use the behavioral model to substantiate the use of demographic variables as potential predictors of MHL to contextualize the discussion regarding clergy's MHL rates.

The History of Clergy as Informal Providers of Mental Health Care Services

Prior to the Enlightenment period and toward the end of the 17th century, scholars discussed the fields of religion, medicine, and psychology as overlapping and complementary pedagogies (Bristow, 2011; Sullivan et al., 2013). With the advent of the scientific method, however, increasing tension arose between matters of the physical world and those belonging to the spirit (Sullivan et al., 2013). The eventual medicalization of the mental health field gradually alienated the spiritual leaders (e.g., pastors, priests, imams, monks, gurus), who had traditionally been viewed as the trusted healers, exorcists, and counselors of their local communities (McMinn, Staley, Webb, & Seegobin, 2010).

Due to growing differences in perspective and authority, both clergy and MHPs began to speak out against one another with suspicion and distrust. Most notably, clergy have tended to disagree with psychological theories about various concepts dealing with morality and sin (McMinn, Ruiz, Marx, Wright, & Golbert, 2006). In response to this view, MHPs have traditionally responded aggressively to religious beliefs that they considered narrow and irrational (Sullivan et al., 2013). As a famed example from 1907, Sigmund Freud called religion a "universal obsessional neurosis" (Freud Reader, 1995, p. 435). Over the past century, the relationship between religion, spirituality, and

psychology gradually fragmented further; however, religious and spiritual integration in mental health has recently been gaining renewed attention in the research (Weber & Pargament, 2014).

Notwithstanding the complex relationship between psychology and religion, individuals with emergent mental health issues still pursue mental health assistance from their trusted clergy (Thomas, 2012). In fact, research efforts spanning five decades consistently showed that approximately 40% of US residents seek out their clergy for psychological help and counseling services (Chalfant et al., 1990; Gurin et al., 1960; Hedman, 2014; Oppenheimer et al., 2004; Pillion et al., 2012). These findings fit within current epidemiological studies showing that 83% and 78% of US residents (a) believe in God and (b) find religion to be important aspects of their lives, respectively (Pew Research Center, 2015). For the majority of people who value spiriutal belief systems, their choice to seek clergy during times of distress is not surprising. Furthermore, the availability, confidentiality, and low or no cost of the clergy services remain important advantages of seeking clergy assistance (Bonner et al., 2013; Hall & Gjesfjeld, 2013).

The majority of polled clergy have reported assisting parishioners with some form of mental illness (Stanford & Philpot, 2011). In view of this phenomenon, researchers have called clergy "front-line community mental health workers" (Koenig, & Ochberg, 1996, p. 848), "de facto mental health" providers (Kirchner et al., 2011, p. 417), and "gatekeepers" to the formal mental health system (Oppenheimer et al., 2004, p. 155). In many communities, seeking spiritual guidance remains the normative response to emotional, psychological, and familial problems (VanderWaal, Fernando, & Handsman,

2012). Additionally, clergy are often the first point of contact when individuals begin to recognize mental illness (Stanford & Philpot, 2011).

Every week millions of US residents seek out trusted clergy to address their mental health problems (Chevalier et al., 2015; McMinn et al., 2010; Polson & Rogers, 2007). Researchers also found that clergy provide counseling services to parishioners for approximately 15% of their weekly working hours (Oppenheimer et al., 2004). Although many motives for this phenomena have manifested over the past two decades (Kirchner et al., 2011; Oppenheimer et al., 2004), more recent explanations include the current financial crises and heightened fear of stigma among certain populations (Payne, 2013; Runnels & Stauber, 2011). Furthermore, social justice activists and emergency responders continue to ask clergy to step into the roles of de facto counseling service providers during large-scale crisis events after the formal mental health system has become saturated (Aten et al., 2013; Kelly et al., 2011).

Seeking clergy for mental health support may not merely be a matter of access, cost, or convenience, however. Researchers have shown that religious and spiritual matters are central pathways of healing for large numbers of help-seekers (Meyers & Sweeney, 2008; Pargament & Lomax, 2013). From the scientific standpoint, religious and spiritual involvement and strategies have gained empirical support as positive and effective interventions (Koenig et al., 2015). Scholars from across disciplines have boasted of the benefits of religious and spiritual interventions for prevention and wellness in clinical mental health (Abu-Raiya, Pargament, Krause, & Ironson, 2015; Goncalves, Lucchetti, Menezes, & Vallada, 2015; Koenig et al., 2015). In just the past few years,

findings showed that positive religious and spiritual beliefs, practices, and interventions improved mental health. Data showed a reduction of symptoms of anxiety (Goncalves et al., 2015), depression (Bonelli & Koenig, 2013; Koenig et al., 2015), substance abuse (Bonelli & Koenig, 2013; Giordano et al., 2015), and suicidal ideation (Kyle, 2013; Rasic, Robinson, Bolton, Bienvenu, & Sareen, 2011). Furthermore, researchers found that the experience of being religious or spiritual related to a reduction in contextual distress related to physical illness (Pedersen, Pargament, Pedersen, & Zachariae, 2013) and interpartner violence (Mahoney, Abadi, & Pargament, 2015). In terms of wellness, research also demonstrated that religion and spirituality correlated with improved physical health outcomes (Koenig, 2014).

Overall, these findings indicated that religious and spiritual practices and interventions increased client wellness, thereby illuminating some of the reasons why individuals with mental illness continue to seek clergy as informal mental health providers. That religion and spirituality provide important resources and interventions for a majority of US residents suggests that clergy will continue in their role of informal helpers. Therefore, MHPs maintain a responsibility to develop and improve collaborative relationships and referral partnerships with faith leaders in their communities (Breuninger, Dolan, Padilla, & Stanford, 2014; Cashwell & Watts, 2010; Stanford & Philpot, 2011).

Clergy as Informal Providers to Marginalized Populations

Research revealed that as many as 60% of US residents did not receive treatment for mental illness (SAMSHA, 2012). Furthermore, populations with minority statuses

(i.e., ethnic/racial, elderly, female, rural, veteran) sought formal mental health care services half as often as populations with dominant racial, gender orientation, and socioeconomic positions (John & Williams, 2013; Mills, 2012; Snowden, 2012). Of those who did seek treatment, as few as 10% received evidenced-based services (Druss et al., 2011; Torrey et al., 2014). Social justice researchers have related mental health disparities (i.e., lack of appropriate services) with the deterioration of physical and mental health, as well as loss of employment, quality of life, and interpersonal relationships (Snowden, 2012; Unutzer, Schoenbaum, Druss, & Katon, 2012). These alarming statistics become increasingly serious in the context of more severe mental illness. Labeled the "mortality gap," the death rates for those with untreated SMI (i.e., schizophrenia, bipolar, and major depression) reduced their life expectancy from between 13 and 30 years (De Hert et al., 2011). Therefore, the problem of mental health care disparities among minority populations remains an urgent issue for investigation and subsequent intervention.

Since the call for research by the US Surgeon General (DHHS, 2001) to examine and remediate the problem of mental health care disparities among communities of color, actual positive change remains limited (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012). Minority populations continue to receive fewer formal services than their majority counterparts and subsequently experience negative outcomes in their physical, mental, relational, and vocational lives (Lopez, et al., 2012; Snowden, 2012; Sue et al., 2012). However, researchers also noted how these underserved populations relied on and, often, preferred informal clergy providers to formal MHPs (Chatters et al., 2011).

Therefore, social justice researchers have called upon researchers to explore the use of clergy as conduits between minority communities and the formal mental health care system (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012). In the next section of this literature review, I provide a review of research regarding the use of clergy by specific minority populations and discuss the findings in relation to the current dissertation study.

African/Black populations and informal clergy providers. Researchers found that African/Black individuals sought clergy first and primarily for their mental health issues (Chatters et al., 2011). In reviewing a national survey spanning 10 years of data, researchers reported that African/Black participants most often choose clergy (21%) for "serious personal problems," followed by general practitioners (16.1%), psychiatrists (9.4%), and other MHPs (8.7%) (Chatters et al., 2011, p. 123). In another study, African/Black participants not only sought clergy assistance 60% more often than Caucasian/White participants, but also preferred clergy over MHPs, seeking formal treatment 53% less often than their Caucasian/White counterparts (Mills, 2012). In another recent survey, researchers found that African/Black clergy spend about 13% of their weekly time counseling parishioners for mental health challenges involving suicide, substance abuse, familial strife, and grieving (Young, Griffith, & Williams, 2014). Throughout the past 20 years, researchers have consistently shown African/Black participants' preferences for clergy providers over formal MHPs (Aten et al., 2013; Neighbors et al., 1998; Neighbors et al., 2007; Stansbury & Schumacher, 2008; Taylor, Ellison, Chatters et al., 2011). Under examination, these researchers have postulated various reasons for this phenomenon, which I discuss next (Snowden, 2012).

Chatters et al. (2011) found that demographic variables were significantly associated with African/Black participants' choice of clergy assistance, with problem type ($x^2 = 8.06$, df = 3, $p < .001$), gender orientation ($x^2 = 16.23$, df = 1, $p < .001$), and denomination-type ($x^2 = 8.06$, df = 5, $p < .001$) showing significant associations. In this study, Pentecostal denominational members were two times more likely than Baptist participants to seek clergy assistance. Death/grieving was the most often sighted reason for reliance on clergy in the counseling capacity, with a 40% increase in odds of seeking clergy assistance for each one unit increase of this predictor variable ($Exp(B)^1 = .40$, $p < .001$) (Chatters et al., 2011). In a related study, older African/Black participants sought out clergy providers more often than their younger counterparts (Stansbury & Schumacher, 2008). Additionally, other researchers found that African/Black participants' use of clergy did not relate to income or educational levels, suggesting a cultural component to their preference for clergy providers (Neighbors et al., 2007; Snowden, 2012).

Other findings indicated that barriers, rather than preference, did influence the African/Black American's choice of clergy providers. Some found that accessing, acquiring, and affording services remained significant barriers to seeking formal mental health care (Unutzer et al., 2013). Even though insurance options have become more readily available due to recent legislative changes, many do not understand the complex process of acquiring insurance and, once obtained, leveraging their coverage options toward obtaining appropriate mental health services (Protection & Act, 2010; Snowden, 2012). For example, general practitioners, as the first point of contact, may not refer

help-seeking individuals for mental health treatment, leaving them with fractionalized care, at best (Glover et al., 2014). Furthermore, general practitioners may misdiagnose African/Black help-seekers due to "diagnostic bias" (Baker & Bell, 2014, p. 363). In fact, when African/Black populations do seek assistance, they are significantly disproportionately diagnosed with SMI, which suggests a s pattern of misdiagnosis and discrimination (Gara et al., 2012). As a result, African/Black populations experience greater risk of not connecting with effective, formal mental health care services, even when they do seek help from appropriate providers.

In addition to systemic barriers, cultural barriers may impede help-seeking behaviors as well as the quality of the received services (Snowden, 2012). More specifically, cultural factors involving MHL (i.e., stigma, fear, lack of trust in treatment providers) have been identified as key points for intervention for many nonmajority populations, including African/Black (Alegria et al., 2014; Chatters et al., 2011). In addition, patriarchal interventions provided by Caucasian/White providers have created environments that do not fit within the cultural framework of clients of color (Whittaker, Whitaker, & Jackson, 2014). For example, minority clients may perceive MHPs who utilize the medical model of intervention as power agents who reinforce patterns of distrust (Young et al., 2014). Together, the demographic context, socioeconomic variables, and cultural misunderstandings have created a complex environment in which the majority of African/Black populations rely on clergy assistance for mental health challenges (Chatters et al., 2011).

Hispanic/Latino populations and clergy providers. With respect to culture and help-seeking preferences, Mills (2012) investigated Hispanic/Latino populations and found that they, when compared to White/Caucasian populations, had 41% lower odds of seeking formal mental health treatment and 36% greater odds of using parochial care for their mental health concerns. Researchers suggested reasons for not accessing formal services, which included low rates of MHL and the need for culturally-adapted models of mental health care with language and translation considerations (Alegria et al., 2014; Lopez et al., 2012). Cultural factors, such as language and stigma, have shown to be key determinants of accessing formal mental health care, with shorter length in the US and Spanish-speaking status predicting reduced service usage (Keyes et al., 2012; Rastogi, Massey-Hastings, & Wieling, 2012). As such, clergy may be culturally preferred and available mental health resources for Hispanic/Latino populations (Keyes et al., 2012).

In another study, 61% of Hispanic/Latino participants contacted clergy for their mental health problems, further demonstrating the potential role of clergy as conduits to the formal mental health care system (Villatoro, Morales, & Mays, 2014). Religion, especially Catholicism, has traditionally been an important part of Hispanic/Latino lives and a significant source of psychological assistance (McField & Belliard, 2009; Taylor, Lopez, Martinez, & Velasco, 2012). For example, the Catholic sacrament of Confession and counsel from priests in the confessional provide important resources for relieving emotional and psychological stress (McField & Belliard, 2009). In a recent study, the cultural mandate of *familismo*, or loyalty and bonding to family, predicted the use of clergy for mental health care provision (Villatoro et al., 2014). Therefore, even though

financial barriers to health care are cited reasons for seeking clergy providers (Alegria et al., 2014), cultural factors also strongly influence the help-seeking preferences of Hispanic/Latino communities (Villatoro et al., 2014).

Asian populations and informal clergy providers. Researchers found that Asian participants also sought informal providers during times of psychological distress, showing 60% greater odds of using clergy providers when compared to Caucasian//White individuals (Cho et al., 2009; John & Williams, 2013; Kane & Williams, 2009). In contrast to Hispanic/Latino populations, Asian Americans born in the US preferred clergy providers more than their immigrant counterparts (John & Williams, 2013). In another study, over one-third of Asian participants disclosed their use of clergy for mental health problems, 70% of whom indicated clinical mental health concerns and were never referred for formal treatment (John & Williams, 2013). Although currently underexamined in the MHL research, certain Asian sub-cultures (e.g., Korean, Indian) who prefer interactions within their cultural communities have demonstrated strong ties with their religious traditions and reliance on clergy for support (Huang, Calzada, Cheng, & Brotman, 2012; Lee, Hanner, Cho, Han, & Kim, 2008).

Because Asian cultures tend to prioritize family loyalty and privacy, fear of stigma is a frequently cited reason for preferring informal mental health care providers (Masuda & Boone, 2011; Sue et al., 2012). In addition, researchers have identified low rates of MHL among Asian populations, specifically low levels of knowledge about when and where to receive appropriate assistance, as a significant barrier to seeking formal mental health care (Masuda & Boone, 2011). Therefore, researchers have nominated

clergy in Asian communities to serve as promoters of MHL and conduits between their faith communities and the formal mental health care system (John & Williams, 2013; Lee et al., 2008).

Age and preference clergy providers. Researchers have also found that older age predicted the use of clergy helpers for mental health issues. Using the behavioral model of health services utilization (Andersen, 1995), Pickard and Guo (2008) found that two predisposing characteristics of older participants (i.e., over 65 years of age) predicted the choice of clergy assistance for their mental health needs. More specifically, *poor social support* and increased *frequency of religious attendance* prompted older participants to seek clergy first for mental health assistance (Pickard & Guo, 2008). In a similar study, older participants with increased *stress levels* and *frequency of religious attendance* showed preference for clergy as the first point of contact for mental health issues (Pickard, 2012). In response to this phenomena of the link betwewn older age and use of clergy providers, Hedman (2014) investigated clergy's confidence about treating older populations. Under comparison, participants reported less confidence in recognizing depression in their older, as compared to younger, parishioners (Hedman, 2014).

Also observing of the relationship between age and preference for clergy providers, Kim Stansbury has lead inquiries via the social work perspective and reported the results of several qualitative studies investigating rural African American clergy members' *perceptions* (Stansbury, 2011) and *perspectives* (Stansbury, Beecher, & Clute, 2011) of counseling older parishioners and MHL for recognizing Alzheimer's Disease

(AD; Stansbury et al.,, 2012). Overall, the findings from these studies described the reliance of African elders on their trusted clergy and the need for increasing MHL training and support for clery providing services to older parishioners, especially in rural areas.

Furthermore, Stansbury et al. (2011) highlighted how individuals holding double and triple minority statuses (e.g., African/Black and elder and African/Black, elder, and rural, respectively) may seek clergy assistance more often than their younger counterparts, citing poor MHL, stigma, and distrust as the key factors relating to this choice. Therefore, multiple minority statuses may predict help-seeking behaviors and encourage the choice of clergy providers, whom parishioners already know and trust. In an earlier study, Stansbury & Shumacher (2008) also provided information regarding clergy's preference for the religious-community model, thereby stressing the need for enhanced interprofessional collaboration between clergy and social workers to meet the needs of older parishioners.

Female, veteran, and rural populations. Although under-investigated in the current MHL research, additional factors may predict the use of clergy as informal mental health care providers. Researchers found that female gender was associated with seeking clergy assistance (Standford, 2007; Wang, Berlund, & Kessler, 2003), with some suggesting that this phenomenon may be due to females' tendency toward greater emotionality (Pescosolido, Boyer, & Medina, 2013). In a recent study of older participants' choice of clergy for mental health assistance, older-aged females were shown to nominate clergy providers significantly more often than their male counterparts

(Atkins, Naismith, Luscombe, & Hickie, 2015), again showing the preference for clergy providers by those holding dual minority designations.

With elevated concerns regarding stigma and confidentiality, veteran and rural participants also pursued clergy assistance more often than formal mental health care services (Jones et al., 2012; Kirchner et al., 2011). Fearing negative stigma and professional retribution, returning service members may seek out spiritual helpers, such as chaplains, to protect their reputations and military positions and statuses (Kim, Britt, Klocko, Riviere, & Adler, 2011). This need for confidentiality prompted service members to seek chaplains and clergy for assistance, even though such services may not adequately meet their psychological needs (Nieuwsma et al., 2013). In response, researchers have introduced models of interprofessional collaboration between chaplains and MHPs to ensure adequate treatment for returning service members (Nieuwsma et al., (2013).

Also with the goal to maintaining confidentiality, rural populations have shown reliance on clergy as informal providers of mental health services (Smalley et al., 2010). In rural areas, lack of access to formal mental health care due to geographical distance and poor transportation are additional reasons for this pattern (Jones et al., 2012; Smalley et al., 2010). Researchers have highlighted the reliance on clergy for both adult and adolescent rural populations (Jones et al., 2012). Furthermore, data showed that the tendency to rely exclusively on clergy for assistance increases when sharing dual minority statuses, such as being both African/Black and rural (Murry, Heflinger, Suiter, & Brody, 2011) or veteran and rural (Kirchner et al., 2011). Therefore, researchers

posited that embedded forms of mental health care (e.g., family, clergy, and teachers) are important providers and promoters of mental health care among rural populations (Murry et al., 2011).

Cultural Variables as Predictors of Clergy Providers: Summary

Clergy are an important part of the mental health system for populations of minority status. Not only do clergy provide necessary services, they also can become advocates and promoters of formal mental health care services when SMI becomes apparent (Jones et al., 2011; Snowden, 2012). This review of the literature demonstrated the importance of investigating the MHL rates of clergy, who may be powerful allies in the struggle to reduce mental health care disparities among populations with minority status or multiple minority statuses due to racial/ethnic, age-related, gender-affiliated, geographical, and veteran-based factors.

Clergy Training

As previously discussed, many people look first and primarily to clergy for informal counseling services and assistance with mental illness (Stanford & Philpot, 2011). Although not all religions and denominations provide training in spiritual counseling activities, research showed that approximately two-thirds of Christian, one-third of Jewish clergy (Moran et al., 2005; Payne, 2013), and 12% of imams (Ali & Milstein, 2012) had taken at least one course in clinical pastoral education. Schools of pastoral counseling use different theological perspectives, yet retain similar models of care, integrating parishioners' spiritual realities and mental health concerns (Ali et al., 2005; McMinn et al, 2010). In addition, the theoretical base for pastoral counseling practices

involves the presupposition of clerical authority in working with parishioners during times of distress (Ali & Mistein, 2012; Gonsiorek, Richards, Pargament, & McMinn, 2009; McMinn & Dominguez, 2005; McMinn et al., 2006; McMinn et al., 2010). In all religious affiliations, clergy represent the authority figures on liturgical texts (e.g., Biblical Old and New Testament, Islamic Qur'an, Buddhist sutras, and Hindu Upanishads and Vedas), which address various psychological, cognitive, emotional, familial, and relational concerns (Ali et al., 2005; Ali & Mistein, 2012; McMinn et al., 2010; Pearce et al., 2014). As mandated by their respective religious texts, clergy provide spiritual assistance for secular problems in any of these domains.

In nuanced and subjective conceptualizations, clergy shape their responses to help-seeking parishioners through the lens of the sacred texts and instructions, liturgical requirements, and moral and religious traditions (McMinn et al., 2010; Pearce et al., 2014; Thomas, 2012). In describing their counseling activities, clergy have used the terms *spiritual counseling*, *pastoral counseling, Biblical counseling,* and *Christian counseling*; however, these terms often become blended and interchangeable with each other and other state-licensed professional counseling services (McMinn et al., 2010; Pearce et al., 2014). In keeping with their sacred perspectives, the majority of clergy have asserted their authority to counsel parishioners in matters involving death and grieving, forgiveness, marital and parenting relationships, anger, sorrow, and worry (Ali et al., 2005; Farrell & Goebert, 2008; McMinn et al., 2006; Moran et al., 2005; Pearce et al., 2014). It is expected and natural, then, for clergy to provide informal counsel to their help-seeking parishioners for such concerns. Indeed, variations of these psychological

issues manifest in the stories and standards of the religious texts as interpreted through the healing traditions of confession, prayer, ritual, worship, fellowship, meditation, mindfulness and yoga (Pearce et al., 2014).

However, researchers have found that clergy prefer for parishioners to seek help from formal MHPs when the presenting problems surpass the clerical scope of professional authority (Farrell & Goebert, 2008; Moran et al., 2005; Payne, 2013; Stanford & Philpott, 2011; Weaver, Flannelly, Flannelly, & Oppenheimer, 2003). The extent to which clergy actually refer out parishioners with SMI may not coincide with this determination (Payne, 2013; Ross & Standford, 2011; Thomas, 2012). In fact, diagnostic categories with subclinical presentations (e.g., pervasive sadness, shock, trauma responses) may challenge clergy's abilities to recognize when such formal mental health care is required (Moran et al., 2005; Openshaw & Harr, 2009; Polson & Rogers, 2007). Therefore, it becomes important for clergy to recognize those symptoms of mental illness that outpace their levels of counseling training and competence.

Clergy reportedly saw parishioners most often for issues involving grief and loss, marital distress, divorce, crises, and depression (Ross & Standford, 2011), all which emerge along a spectrum of emotionality and functionality (APA, 2013). Therefore, researchers have called clergy to the "gatekeeping model," indicating the importance of their recognizing when subclinical issues become more severe, requiring referral and promotion to MHPs (Ross & Stanford, 2011, p. 177). However, the gatekeeping role demands a level of training that researchers have found lacking (Stanford & Philpott, 2011).

Although research is scant on the topic of clergy training in clinical mental health issues, a few studies offer some insights. Stanford and Philpott (2011) found that 71% of Baptist senior ministers claimed an inability to recognize mental illness. Similarly, 71% of California Protestant clergy claimed they received inadequate training for meeting the current mental health needs of their parishioners (Payne, 2013). In fact, three-fourths of them asserted that they would benefit from targeted counseling training (Payne, 2013). Concerning training, only 25% of pastors from Hawaii reported that their seminary adequately trained them in counseling services and 56% reported inability to deal with SMI (Farrell & Goebert, 2008).

Early research revealed similar findings, with less than half of New York City clergy reporting having at least one counseling course during seminary. Not surprisingly, current levels of clergy training in formal mental health care practices (e.g., courses in assessment, diagnosis, and evidenced-based treatment modalities) fall below those of MHPs (Montesano et al., 2011). With a larger scope of investigation, Ross and Stanford (2014) evaluated the accredited masters of divinity programs in North America and found that only 27% of seminaries were attempting to increase effective trainings in mental health, with most of them only giving perfunctory trainings for effective response to SMI. Most seminary curricula neglected comprehensive coverage of clinical mental health issues (Ross & Stanford, 2014). Although some seminary trainings included pastoral counseling as part of the curricula, most clergy have admitted a lack of targeted training in mental health counseling issues (Payne, 2013; Thomas, 2012).

The training programs of other non-Christian clergy are largely uninvestigated. However, in one study imams reported receiving less training than did their Christian clergy counterparts (Ali et al., 2005; Ali & Milstein, 2012). Although not recently evaluated, rabbis also reported inadequate training for mental health issues (Milstein, Midlarsky, Bruce, Raue, & Bruce, 2000). Overall, the identified studies on Christian, Jewish, and Islamic leaders training and curricula suggest a risk for those populations with SMI who rely on clergy assistance for their mental health challenges due to a shortage of training.

Clergy as Referral Partners

Clergy have asserted professional competence for responding to subclinical mental health issues, such as death and loss, family problems, and situational anxiety (Moran et al., 2005; Openshaw & Harr, 2009; Payne, 2009; Polson & Rogers, 2007; Ross & Standford, 2014). With regard to clinical and serious mental illnesses, however, clergy would rather refer parishioners to MHPs (Aten et al., 2013; Aten, Mangis, & Campbell, 2010; Farrell & Goebert, 2008). More specifically, clergy have claimed that issues involving suicide, major depression, schizophrenia, violence, and serious substance abuse warranted professional intervention (Aten et al., 2013; Moran et al., 2005; Polson & Rogers, 2007).

Surprisingly, the research showed that clergy would not refer the majority of their parishioners to MHPs, even when the case vignettes depicted parishioners with serious clinical problems (Farrell & Goebert, 2008; Moran et al., 2005; Polson & Rogers, 2007; Stanford & Philopott, 2011). In fact, clergy rarely chose to refer their parishioners to

MHPs, with specific findings showing referral rates lower than 10% (Farrell & Goebert, 2008; Polson & Rogers, 2007; Stanford, 2007; Stanford & Philpott, 2011). Overall, these data revealed inconsistencies between clergy's acknowledged lack of counseling preparation and the decision to persist in counseling those with clinical mental health issues. This discrepancy leads researchers to question reasons for these patterns of non-referral.

Reasons for Nonreferral

Basing their hypotheses on the historical distrust between religion and psychology, researchers investigated clergy-MHP referral partnerships and confirmed that clergy prefer to work with MHPs with whom they have developed trusting and long-term relationships (McMinn, Runner, Fairchild, Lefler, & Suntay, 2005; Nieuwsma et al., 2013; Openshaw & Harr, 2009; Thomas, 2012). Other findings showed that clergy insisted on having some shared values or beliefs with the MHPs from whom they will seek consultation and referral connections (Breuninger et al., 2014; Pillion et al., 2012; VanderWaal et al., 2012). With these findings, researchers have suggested models for clergy-MHP collaboration and referral pathways with varying degrees of success (Aten et al., 2013; Breuninger et al., 2014; Nieuwsma et al., 2013).

Additionally, practical considerations, such as lack of access to services, high cost of formal treatment, and informational gaps about MHPs may pose significant barriers to clergy referrals to MHPs (Alegria et al., 2014; Openshaw & Harr, 2009; Oppenheimer et al., 2004). Again, these barriers manifest more often in populations of minority statuses, where culturally sensitive services and funding remained largely unavailable (Lopez et

al., 2012; Stansbury & Schumacher, 2008; Snowden, 2012; Sue et al., 2012). In these marginalized communities, clergy were busy filling the gap in services rather than promoting formal mental health care provision. I must note, however, that no one explanation for poor referral partnerships has emerged in the literature. This fact remains problematic for those social justice agents attempting to use clergy to build bridges between underserved populations and the formal mental health care system (Nieuwsma et al., 2013; McMinn et al., 2005; Payne, 2013; Thomas, 2012).

Clergy Mental Health Literacy

Before investigating clergy-MHP interprofessional collaboration and referral partnerships, clergy's MHL rates must first be understood (Jorm, 2012). According to the MHL model (Jorm, 2012), researchers must explore and examine the extent to which clergy recognize mental illness in need of referral to MHPs before they can identify other barriers (Farrell & Goebert, 2008; Pillion et al., 2012). In my review of MHL studies conducted between 2000 and 2015, I found only five studies regarding US clergy's ability to recognize mental illness. Although other researchers inquired broadly into clergy perceptions, perspectives, and experiences with counseling parishioners as informal mental health providers (Pickard, 2012; Stansbury, 2011; Stansbury et al., 2012; Stansbury & Schumacher, 2008), they did not measure the actual MHL rates of clergy, which remains vital for understanding and improving training and referral activities via interprofessional collaborative efforts with MHPs.

Of the five identified studies, two surveyed non-Christian clergy and three studied Christian clergy. Milstein et al. (2000) and Ali et al. (2012) investigated non-Christian

clergy, including rabbis and imams, respectively. In a comparison between psychologists and rabbis, Milstein et al. (2000) found that clergy were largely able to differentiate between a schizophrenia vignette and ones depicting subclinical concerns, including spiritual problems and mourning. However, the results also showed that rabbis underestimated the severity of the clinical mental health symptoms. In their national study, Ali et al. (2012) found imams could largely recognize depression; however, imam participants preferred to refer their parishioners out to MHPs only when remaining in close collaboration. The outcomes of these two studies provided an informative view of the diagnostic abilities of non-Christian clergy members, but both studies were limited in the types of disorders presented and the types of clergy populations examined.

Only three of the identified studies examined Christian clergy's MHL. These researchers limited the scope of their investigations to either particular denomination-types or specific populations. In their qualitative study, researchers addressed nine African American clergy on their understanding of parishioners' experiences of depression, offering quantitative data on their ability to recognize depression (Stansbury et al., 2012). Pillion et al. (2012) investigated 48 Catholic priests in North Carolina and their diagnostic perspectives on a series of mental health symptoms presented in vignette case studies. Most recently, researchers examined 61 clergy and their ability to recognize SMI in returning service members (Chevalier et al., 2015).

Although the results of these three studies showed moderate clergy diagnostic abilities, all three studies documented concerns with Christian clergy's abilities to recognize fully the symptoms of SMI. Furthermore, even though clergy participants "felt

comfortable" in their ability to identify mental health problems, participants also expressed openness to increasing training opportunities in MHL (Pillion et al., 2012, p.1; Stansbury et al., 2011). Training seemed especially important for less obvious mental health illnesses, with depression and schizophrenia being largely identified while other concerns (PTSD, traumatic brain injury) were found less recognizable (Chevalier et al., 2015).

Overall, these three studies with US-based Christian clergy represented less than 200 of the total Christian clergy population in the US. Therefore, the majority of the geographical locations, denominations, and illness-types remain largely unexplored in the current literature base. Given that most residents of the US (71%) belong to Christian denominations (i.e., with 23% Unaffiliated, 2% Jewish, and <1% Other), the current scope of identified research does not represent the religious landscape of the country (Pew Research Center, 2015) or the needs of the millions of US residents seeking assistance from Christian clergy. A gap in the research regarding Christian clergy's ability to recognize mental illness remains problematic for the vast numbers of US residents seeking clergy assistance who may receive inadequate treatment. Therefore, the intent of this research study was to extend the current MHL research base to include a diverse sample of Christian clergy from across the US. The results may inform counselors and counselor educators how to increase interprofessional trainings, collaboration, and referral partnerships with those clergy members currently serving on the front-lines of mental health provision without adequate training or resources.

Methodological Review

Over the past 20 years, researchers have frequently investigated the construct of MHL using the vignette case study method (Burns & Rapee, 2006; Coles & Coleman, 2010; Jorm, 2012; Jorm et al., 1997; Reavley et al., 2012). As an example, I identified over 20 studies that used some version of the Mental Health Literacy and Stigma Questionnaire- Version 8 (MHLSQ-8) (Reavley & Jorm, 2011b). This instrument presents the symptoms of one of six mental health disorders in a vignette case study to randomly selected participants to determine the accuracy of their diagnosis, choice of treatment and provider, beliefs and stigma about etiology of mental illness, and opinions about the helpfulness of various decision-making processes concerning the diagnoses. The six disorders utilized in the survey include depression, depression with suicidal thoughts, PTSD, social phobia, early onset psychosis/schizophrenia, and chronic psychosis/schizophrenia (APA, 2000).

Researchers have relied on the vignette case study case method in studies with both qualitative and quantitative designs, on diverse samples, across populations, and even among clergy (Ali & Milstein, 2012; Coles & Coleman, 2010; Milstein et al., 2000; Moran et al., 2005; Noort et al., 2012; Pickard, 2012). In these MHL studies, researchers collected large amounts of demographic data in order to conduct various statistical tests in relation to the MHL conceptual model (Pickard, 2012). Since the predictor variables in most MHL studies involved predisposing demographic characteristics, researchers did not use experimental and quasi-experimental designs, as classically defined by Campbell et al. (1963). Rather, these MHL researchers relied on statistical controls to offset threats

to internal validity with regard to missing control groups and the nominal or dichotomous nature of the variables. Therefore, the observed limitations of the majority of MHL research involved the level of measurement utilized and concomitant lack of parametric data collected (Campbell et al., 1963; O'Connor & Casey, 2014).

As is standard in MHL research, statistical data typically included descriptive statistics, including numbers and percentages compared across predictor variables (Jorm, 2012). In addition, researchers conducted logistic regression (Reavley et al., 2014), chi-square analysis (Reavley & Jorm, 2011a), and principle components analysis (Jorm et al., 1997) to interpret the various qualitative data points. In one study, Neighbors, Musick, and Williams (1998) investigated clergy as service providers to African American participants and conducted chi-square analysis, cross-tabulation tables, and regression to provide detailed perspective of the collected data. Other researchers have interpreted MHL rates according to demographic variables by utilizing multiple logistic regression (Lauber et al., 2003; Pickard, 2012). Simple correlational analyses have also been useful to interpret various data patterns (Farrer et al., 2008).

For the few identified studies that examined clergy's MHL, researchers also collected demographic data in order to explore potential areas for intervention. Demographic information typically included forced choice responses about gender (*male/female*), age (in whole years), highest level of education (*high school, associates, bachelors, masters, and doctoral*), and degree type (*divinity or other*) (Ali et al, 2012; Milstein et al., 2000; Noort et al., 2012; Pillion et al., 2012; Stansbury et al., 2011; Stansbury & Schumacher, 2008). When examining diverse religious samples,

researchers also noted denominational affiliation types, usually narrowing choices by either four main categories (i.e*., Catholic, Traditional Protestant, Evangelical Protestant, Historically Black Protestant*) or according to the top ten most populous faith communities (*Catholic, Greek Orthodox, Southern Baptist Convention, United Methodist Church, Evangelical Lutheran Church in America, National Baptist Convention (Historically Black Tradition), Church of Christ, Assemblies of God, American Baptist Churches (Mainline Tradition), and Presbyterian Church*) (Pew Research Center, 2015; Pickard, 2012). In addition, many studies inquired about the years in ministry (in whole number), geographical location (by state), number of parishioners (by number), and how much, if any, pastoral counseling training had been received (in courses) (James et al., 2014; Noort et al., 2012; Sullivan et al., 2013). Using the examples of these previous studies, I established the framework for exploring and examining clergy's MHL rates according to the demographic variables typically found in the MHL and religious studies research.

Of the few previous studies on clergy's MHL or referral rates, researchers also used the vignette case study format (Ali et al., 2005; Farrell & Goebert, 2008; Pillion et al., 2012) or qualitative designs (Stansbury & Schumacher, 2008). Only this past year have researchers developed a valid and reliable MHL scale by which to conduct parametric statistical analyses (O'Connor & Casey, 2015). With a parametric instrument, such as the MHLS (O'Connor & Casey, 2015), data exploration could include statistical measures, such as analysis of variance (ANOVA), to assess if there are any significant differences between groups on the dependent variable, MHL. In addition, multiple linear

regression could be used to test various demographic variables (i.e., predisposing factors), training methods (i.e., manipulated variables), or environmental changes (i.e., contextual factors) to test which factors affect MHL. The development of the MHLS (O'Connor & Casey, 2015) presents an important opportunity to collect parametric data on the MHL of clergy. Researchers may then initiate additional follow-up studies as well as MHL trainings and campaigns. Using the MHLS (O'Connor & Casey, 2015), I conducted the first investigation of clergy's MHL rates utilizing this valid and reliable scale to collect parametric data and conduct quantitative analysis.

Summary of Literature Review

Millions of US residents currently go without evidenced-based mental health care (SAMSHA, 2012). These statistics escalate among populations of minority status who often seek and prefer clergy providers (Lopez et al., 2012; Snowden, 2012; Sue et al., 2012; SAMSHA, 2012). In response, policy-makers have postulated that understanding MHL rates in regard to help-seeking may inform programs aiming to increase participation in the formal mental health care system and reduce the currently high burden of disease caused by SMI, especially experienced by marginalized populations (Alegria et al., 2014; Snowden, 2012; Unutzer et al., 2014; Wang et al., 2005).

Clergy providers have traditionally provided parishioners with emotional, familial, and psychological support, and often act as front-line mental health care workers and gatekeepers to the formal mental health care system (Oppenheimer et al., 2004; Payne, 2013; Sullivan et al., 2013; Thomas, 2012). As such, they may be the ideal conduits between underserved populations and formal providers. This role, however,

demands that clergy recognize mental illness in need of referral to MHPs. In recent years, clergy's MHL has become a concern due to patterns of non-referrals (Farrell & Goebert, 2008; Sullivan et al., 2013; Stanford & Philpott, 2011). If clergy do not recognize when parishioners' mental health needs cross from subclinical pastoral issues to more severe symptomologies, the safety and wellness of these parishioners and their families and contacts may be in jeopardy (Farrell & Goebert, 2008; Stanford & Philpott, 2011; Sullivan et al., 2013).

In the past 20 years, researchers have conducted numerous MHL studies in the general population (Angermeyer et al., 2009; Cho et al., 2009; Coles & Coleman, 2010; Demyttenaere et al., 2004; Jorm, 2012). However, few researchers have investigated clergy's MHL rates though such literacy is the precursor to identifying mental illness and making appropriate referral decisions (Jorm, 2012; O'Connor & Casey, 2014). Although MHPs have called for research into improving clergy-MHP collaboration (McMinn et al., 2010; Payne, 2013; Sullivan et al., 2013), current interprofessional training efforts by both divinity instructors and counselor educators remain scant (Dobmeier & Reiner, 2012; Ross & Stanford, 2014; Singh, Shah, Gupta, Coverdale, & Harris, 2012). The results of this dissertation may inform counselors and counselor educators how to implement necessary interprofessional trainings and referral partnerships with those clergy currently serving on the front lines of mental health. In the next chapter, I describe the research design and methods appropriate for this line of study.

Chapter 3: Research Method

In the previous literature review, I described the need for targeted investigation of clergy members' abilities to recognize parishioners with mental illness in need of referral to formal mental health resources. In this quantitative study, I explored and examined clergy's MHL rates according to demographic and educational variables. The results may inform needed interprofessional trainings, referral partnerships, and collaborative efforts between clergy and MHPs so that both professional groups may respond effectively to those populations currently underserved by the formal mental health care community.

In this chapter, I review the overall purpose, design, and methodology for this dissertation study. I also explain the ethical and practical reasons for choosing specific methods and approaches. With attention to ethical research standards of the counselor education field (ACA, 2014), I describe the population, sampling and sampling procedures, and methods of recruitment, participation, instrumentation, data collection, and analysis chosen for this study. Throughout the chapter, I also explain the scientific, ethical, and practical justification for the selected methodological choices.

Purpose of Study

Since the onset and proliferation of high-profile crisis events, health care debates, and growing mental health care disparities, researchers have focused on the need for interprofessional collaborative efforts between clergy and MHPs (Aten et al., 2013; Milstein, Manierre, Susman, & Bruce, 2008; Singh et al., 2012; Snowden, 2012; Weaver, 1993). As the first-responders to those in crisis, clergy remain on the front lines of the

mental health care system, with reportedly low referral rates to MHPs (Farrell & Goebert, 2008; Singh et al., 2012; Stanford & Philpot, 2011; Sullivan et al., 2013). Researchers posited that a legacy of distrust between clergy and MHPs is a main reason for the lack of effective referral partnerships (McMinn et al., 2005; Oppenheimer et al., 2004; Stanford & Philpot, 2011; Sullivan et al., 2013). Other researchers also found specific barriers to referral and collaboration practices, including issues of access, cost, and stigma (McMinn et al., 2005; Mojtabai et al., 2011; Openshaw & Harr, 2009; Young, Griffiths, & Williams, 2015). Additionally, researchers hypothesized that low MHL rates potentially reduced the extent to which clergy referred parishioners to MHPs (Farrell & Goebert, 2008; Moran et al., 2005; Openshaw & Harr, 2009; Sullivan et al., 2013; Weaver & Koenig, 1996). They postulated that clergy who cannot discriminate between various types and severity levels of mental health problems may not know when and how to refer parishioners to MHPs.

In a review of literature, I identified only three studies in the last 15 years that specifically examined the MHL rates of Christian clergy in the US (Chevalier et al., 2015; Pillion et al., 2012; Stansbury et al., 2011). Therefore, the purpose of this quantitative, cross-sectional survey research was to investigate the MHL rates of Christian clergy across the US and to what extent demographic and educational variables predicted higher levels of MHL. I measured clergy's ability to (a) correctly label various mental health disorders, (b) recognize risk factors and causes, (c) understand where to find accurate mental health information, (d) recognize appropriate self-help methods (e) identify effective professional help, and (d) demonstrate attitudes that promote help-

seeking behaviors, as shown by their MHL score on the MHLS (O'Connor & Casey, 2015). I compared the findings of the MHLS (O'Connor & Casey, 2015) according to denominational affiliation type and further analyzed which, if any, demographic and educational variables impacted levels of MHL. The overall purpose was to provide the first scale-based measure of the MHL rates of a national sample of Christian clergy in the US and introduce potential predictors of MHL. The long-term purpose of the research continues to reflect my intent to disseminate data in order to inform interprofessional collaboration and referral processes between clergy and MHPs, potentially reducing current mental health care disparities.

Research Design and Rationale

The nature of this study was a quantitative, cross-sectional survey research design. The independent/predictor variables included the following demographic variables: age (in whole years), gender identity (*male, female, and other*), geographical location (*rural/urban*), and denominational affiliation, according to the four largest denominational categories (*Catholic, Mainline Protestant, Evangelical Protestant, and Historically Black Protestant*) (Pew Research Center, 2015). To be clear, several Protestant denominations overlap, but reflect the following general categories: Mainline Protestants typically include Methodist, Lutheran, American Bapstist, Episcopal, Presbyterian, and Reformed movements. Evangelical Protestants typically include Southern Baptist, Restorationist movements, Holiness, Pentecostal, Seventh Day Adventist, Evangelical Lutheran, and non-denominational groups. Historically Black Protestant groups include African Methodist-Episcopal (AME), National Baptist,

Missionary Baptist, Independent Baptist, and some Pentecostal and charistmatic groups (Pew Research Center (2015).

In addition to demographic variables, I also explored various educational factors, which resulted in significant findings in previous clerical studies (Hedman, 2014; Payne, 2013; Pickard, 2012). These independent/predictor variables included the following educational variables: educational level in years of postsecondary schooling (in whole years), degree-type (*divinity, mental health, other*), and number of clinical mental health (MH) training courses (in whole numbers). For all the predictor variables, I relied on previous religious and MHL studies to create an impartial and original demographic form (Appendix D).

The dependent/outcome variable was the rate of MHL, and I administered the 35-item MHLS to measure this variable. The MHLS is a scale-based measure of the knowledge, beliefs, and attitudes regarding mental illness which produces a total MHL score between 35-160 for each participant (O'Connor & Casey, 2015). I used analysis of variance (ANOVA) to determine whether differences in MHL rates occur between clergy of different denominational affiliations. I also employed multiple linear regression analyses to explore which, if any, predisposing demographic characteristics predicted significant changes in MHL scores.

Research Design With Regard to Research Questions

In this dissertation study, I used a quantitative cross-sectional survey design. Researchers choose designs for their studies that fit both the question-type as well as practical and ethical constraints (Campbell et al., 1963). Many social science researchers

in the counseling field utilize cross-sectional or quasi-experimental designs, which rely on statistical analyses as a method of control (Podsakoff, MacKenzie, & Podsakoff, 2012). Cross-sectional designs measure aspects of a particular population at one moment in time according to the property-disposition framework (Podsakoff et al., 2012). Using this framework, researchers compare or relate participants' characteristics or experiences (i.e., the predictor variables) with their attitudes, beliefs, or preferences (i.e., the outcome variable) using some formal measure or survey instrument (Groves et al., 2009). The lack of randomization and control (i.e., of the type and timing of a predictor variable) in the cross-sectional design can result in weaker internal validity when compared to the quasi-experimental and true experimental design; however, the cross-sectional design remains a feasible and ethical option for measuring property-disposition relationships (Frankfort-Nachmias & Nachmias, 2008).

In this quantitative, cross-sectional survey research, I explored and examined the property-disposition relationships among clergy in the US. Using this design, I examined the following three questions:

Research Question 1: Is there a significant difference in mental health literacy scores, as measured by the MHLS (2015), among Christian clergy of different denomination-types?

$H_0$1: There are no significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 = \mu 2 = ... = \mu k$

$H_1$1: There are significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 \neq \mu 2 \neq ... \neq \mu k$

Research Question 2:To what extent, if at all, do educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0$2: Educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), do not predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1$2: At least one of the predictor variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H1: At least one $\beta 1 \neq 0$, $p \leq .05$

Research Question 3: To what extent, if at all, do demographic variables (*age, gender orientation, geographical location*) predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0$3: Demographic variables (*age, gender orientation, geographical location*) do not predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1$3: At least one of the predictor variables (*age, gender orientation, geographical location*) predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H1: At least one $\beta 1 \neq 0$, $p \leq .05$.

Research Design with Regard to Time and Resource Constraints

For the current study, I collected data from, rather than conducted an intervention for, a national sample of clergy from various denominations in the US. Previous researchers found that electronic (i.e., web-based) designs could garner a diverse pool of willing participants (Meho, 2006; Ward et al., 2012). I also found that the cross-sectional survey design with a web-based administration enabled a large and diverse clergy population to be included in the study. Since time and resources are generally limited in doctoral studies, researchers often prefer web-based administrations of quantitative surveys to face-to-face or telephone methods (Meho, 2006; Ward et al., 2012). However, the cross-sectional survey design also has inherent threats to its internal validity due to the researcher's inability to manipulate the independent variable, conduct non-probability sampling, and use a control group (Campbell et al., 1963; Creswell, 2013). Due to these inherent design weaknesses, I was not able to ascribe causal meanings to the data for this dissertation study (Campbell et al., 1963; Podskahoff et al., 2012). However, I relied on statistical analyses to balance some of the threats to validity and find meaningful results, as will discussed in the results section (Field, 2013).

Research Design with Regard to Advancing Knowledge

Since researchers cannot examine predisposing variables under true experimental design, the cross-sectional survey design was appropriate for this dissertation study (Frankfort-Nachmias & Nachmias, 2008; Podsakoff et al., 2012). Given the potential relevance of this study to actual clergy practices, a strength of the cross-sectional survey design was the strong external validity resulting from an investigation of participants in their natural settings (Chang & Krosnick, 2009; Evans et al., 2015; Trochim & Donnelly, 2006). This design choice was also consistent with the designs of previous MHL research (Jorm, 2012; Pillion et al., 2011). Using the results, I may advance, support, and challenge both practical and evidenced-based knowledge involving MHL education for clergy (Aten et al., 2013) and current policies for reducing disparities (Snowden, 2012). I may also inform counselor training and education concerning interprofessional trainings and referral partnerships with clergy (CACREP, 2015; Cashwell & Watts, 2010).

Design Summary

For this dissertation study, I investigated several predisposing demographic and educational variables in relation to clergy's MHL rates. The cross-sectional survey design provided an appropriate and feasible framework for the examination of these predisposing variables. Furthermore, I utilized evidenced-based strategies for increasing the objectivity and generalizability of the study (Groves et al., 2009; Trochim & Donnelly, 2006). In using the cross-sectional design, I employed current survey methods to maximize the reliability and accuracy of the collected data (Groves et al, 2009; Trochim & Donnelly, 2006). Because of feasibility concerns involved in the collection

of data from a national sample of diverse clergy, I used non-probability sampling strategies and web-based methods, which I describe next in the methodology section (Meho, 2006; Ward et al., 2012).

Methodology

The research method details the exact instructions regarding when, how, and from whom the researcher collects data (Creswell, 2013). The objectives of this study guided my choice of methods and included the following considerations: the variables; the number of participants; the number, level, and type of measurements; the setting of the study; sampling procedures; and potential controls for increasing the internal validity of the study (Groves et al., 2009). Since online surveys provide a more feasible means of collecting data from a large cross-section of clergy, I utilized a computer-administered survey questionnaire (CASQ) to collect data (Ward et al., 2012). Using this method, I attempted to maximize the accuracy of data collection processes and minimize measurement error through the application of evidenced-based data collection strategies utilized by prior researchers (Groves et al., 2009; Millar & Dillman, 2011; Ward et al., 2012). In the next section, I discuss how I addressed concerns regarding (a) defining the population, (b) choosing appropriate sampling and sampling techniques, and (c) applying recruitment, participation, and data collection strategies related to instrumentation and the CASQ process.

Population and Target Population

The target population was Christian clergy in the US as of March 1, 2016. Because no uniform definition exists for *Christian clergy*, I chose the parameters for

defining this population by analyzing previous religious and social science research (Adams, McMinn, & Thurston, 2014; Hartford Institute for Religious Research, 2015a; Hedman, 2014; Payne, 2013; Pickard, 2012; Weaver et al., 1996). These religious researchers described *Christian clergy* as including paid or unpaid, schooled or unschooled, and licensed or unlicensed individuals who assume leadership roles in churches that rely on faith in Jesus and the traditional Biblical text. Using this broad definition, researchers have used any of the following titles to describe these leaders: *deacons, elders, leaders, ministers, pastors, priests, and/or teachers* (Hartford Institute for Religious Research, 2015a; Hedman, 2014; McMinn et al., 2006; Pickard, 2012). For the purposes of this study, I chose the following parameters for inclusion in this study: Christian clergy are any church deacons, elders, leaders, ministers, pastors, priests, and/or teachers who interact with church attendees using the Bible and Jesus Christ as the foundational belief system. Therefore, any individual listed on the Christian church leadership or staff web page, regardless of their title, could participate in this study. I explained these parameters on the participation invitation so that those not meeting these standards could remove themselves from the study (Appendix B). I used electronic mail (email) contacts taken directly from church staff registries to identify potential participants, which may have also added a layer of protection ensuring proper participant selection and participation. I outline the details regarding identifying church registries below.

Target population size. The US Bureau of Labor and Statistics (2011) identified 48,020 American clergy members. Showing noteworthy difference, the Hartford Institute

for Religious Research (2015b) stated the number of North American clergy as approximately 600,000. The divergence stemmed from differing definitions of *clergy*. Dr. Jackson Carroll, divinity expert at Duke Divinity School, posited that using 600,000 would be most appropriate for religious studies research (Hartford Institute for Religious Research (2015b). Because the exact population size is unknown, I had to use non-probability and convenience sampling methods with a specified population frame (Groves et al., 2009; Hartford Institute for Religious Research, 2015b). The population frame for the current study included *Christian clergy*, as defined above, from any denomination in the US with known email addresses drawn from an extensive church database, as discussed in the next section.

Sampling Strategy

In this dissertation study, I gathered information from a large and heterogeneous clergy population. Given the challenges involved in defining, identifying, and contacting all Christian clergy in the US (the target population), I applied non-probability sampling strategies using a specified sampling frame. Non-probability sampling procedures include convenience, purposive, or quota sampling (Frankfort-Nachmias & Nachmias, 2012). Although non-probability sampling strategies are not the gold standard for research (Campbell et al., 1963), researchers can take appropriate precautions to preserve the reliability and validity of the design (Creswell, 2013). Because a uniform definition of *Christian clergy* does not exist, I could not use probability sampling (Campbell et al., 1963). Therefore, non-probability convenience sampling procedures were appropriate and feasible for the current investigation.

In order to gather data from clergy across the US and among various religious denominations, I administered CASQ questionnaires delivered via the World Wide Web (Web). As commonly used by other social science researchers (Chevalier et al., 2015; Hedman, 2014; Pickard, 2012; Pillion et al., 2012; Rogers, Stanford, & Garland, 2012), I used convenience sampling methods to gather data from clergy. The use of non-probability, convenience samples enabled data collection to be efficient in terms of time, cost, and accessibility of respondents (Krosnick, 1999). Because the CASQ method allowed participants time to respond to the survey, I may have increased participation by using this method of data collection, as posited by Chang & Krosnick, 2009). Additionally, CASQ methods may have mitigated potential interviewer biases that sometime manifest during face-to-face data collection strategies (Groves et al., 2009).

With the strengths of using the CASQ method, however, were also several risks. Compared to face-to-face and telephone methods, researchers have found that self-selection bias, coverage bias, and non-response error rates increased in some CASQ studies (Millar & Dillman, 2011; Ward et al., 2012). Researchers posited that reasons for these risks cold reflect a lack of access to and familiarity with technology (Groves et al., 2009). For example, researchers related older age of participants with reduced response rates due to their lack of technology savvy (Klovning, Sandvik, & Hunskaar, 2009). Since age was a predictor variable in my study, I considered this concern during the data analysis process, which I present in the next chapter.

Further regarding response rate, other researchers compared web-based, telephone, and in-person surveys and found that web-based methods showed the lowest

response rates (Heerwegh & Loosveldt, 2006). Other researchers reported response rates for Web-based surveys between 25-35% (Millar & Dillman, 2011) Of particular concern for this dissertation study was the documented response rates for the software being utilized for survey delivery, Survey Monkey. Survey Monkey researchers showed an even lower average response rate (as low as 5%) for their surveys, as compared to typical web-based administrations (Survey Monkey, 2016). Therefore, I examined previous research to discover potential strategies to increase participation and provide suggestions for improving survey administration, which I discuss next (Millar & Dillman, 2011).

To reduce non-response error in online studies, Heerwegh and Loosveldt (2006) found that personalizing invitation emails increased response rates. Researchers who had academic email addresses (i.e., *.edu*) and utilized them to send out surveys also found increased response rates (Porter & Whitcomb, 2007). Although addressing each respondent personally was not possible, I did utilize my university email address and addressed participants as fellow *colleagues* in the caring profession. I also included transparent explanations for the purposes and motivation for the research, which comprised both spiritual and mental health implications. In web-based research, such transparency increased the response rates and participation in web-based surveys (Millar & Dillman, 2011). Participants who found interest in the survey topic also demonstrated increased response rates (Groves, Presser, and Dipko, 2004).

In consideration of the data from these collective studies regarding response rates in web-based research, I included detailed information about the current project in the initial email invitation (Appendix B) and utilized my .edu email address to increase

response rates. Although repeat emails also may have increased the response rates, I chose to only send out one email to each potential participant in order to maintain the anonymous nature of the study (i.e., avoiding the tracking individual participants) (Millar & Dillman, 2011). Knowing the choice to not remind and repeat invitation emails likely would reduce response rates (Millar & Dillman, 2011), I increased my potential participant pool to a random selection of 6000 in order to reach the sample size.

Drawing the Sample

To fill a gap in the current research about the MHL of diverse clergy members, I examined data from a heterogeneous sample of Christian clergy from across the US. Using personal pastoral contacts, church registries advertised on the Web, and individual church registries publicly provided by individual denominational groups, I researched and performed an extensive search for a large compilation of Christian clergy across the US who provided email contact. In my literature review of clerical research, I identified the use of online church databases as a frequent form of recruitment for clergy participants (Hedman, 2014; Openheimer et al., 2004; Pickard, 2012). To simplify the online searches, researchers have either located church directories with attached clergy email addresses or purchased pre-compiled lists of clergy participants (Hedman, 2014; Noort et al., 2012; Pickard, 2012). In previous studies, researchers began their recruitment by inviting participation, thereby highlighting the non-commercialized intent for their study and volunteer nature of participation (Hedman, 2014; Noort et al., 2012; Pickard, 2012). These strategies maintained ethical and legal compliance with current anti-spamming regulations (i.e., *CAN-SPAM*) regarding the use of pre-compiled lists for

drawing samples (US Federal Trade Commission, 2008; Wiles, Heath, Crow, & Charles, 2005).

Using the strategies maintained by other researchers, I identified a pre-compiled list of 109,000 clergy contacts drawn from church databases and public directories by APC Services Limited (APC Services, Ltd., 2016). This research and management organization consistently compiles and checks the list to maintain compliance with anti-spamming regulations. They also publish the *Directory of Churches,* continually monitoring the accuracy of contact information and compliance with opt-out (i.e., *unsubscribe*) requests (APC Services, Ltd., 2016). Regarding the ethical and legal use of pre-compiled lists, I reviewed current legislation and found that researchers are exempt from anti-spamming laws and may send participation invitations to large groups of unknown individuals (US Federal Trade Commission, 2008). Prior to obtaining this list, I also inquired of Walden University's Institutional Review Board (IRB) to ensure the ethical requirements when purchasing pre-compiled samplings lists. In response, I received confirmation that such practices remain ethically acceptable and feasible options for data collection (L. Munson, *personal communication,* January 11, 2016). See Appendix A for a copy of this email exchange. Using these 109,000 clergy contacts as the sampling frame, I collected data from clergy participants to conduct the described data analyses.

In consideration of the above statistical, ethical, and methodological considerations, the final sampling frame for this current study was a compilation of 109,000 church contacts throughout the US and representative of all major

denominations, as provided by APC Services, Ltd. (2016). This list included Christian clergy from all major denominations across the US with email addresses and physical addresses, the latter certified by the US Postal Service to ensure accuracy (APC Services, Ltd., 2016). From this list, I randomly selected 6000 contacts for potential participation using Microsoft Excel's RAND function (Microsoft Corporation, 2016).

Sample Size

To determine appropriate sample sizes, researchers must first define the population and population size. As previously discussed, the population size for Christian clergy in the US varies according to polling methods (Hartford Institute for Religious Research, 2015b). Survey estimates included rates as low as 48,020 (US Bureau of Labor and Statistics, 2011) to 600,000 (Hartford Institute for Religious Research, 2015b). Statistically, both poll numbers are large and require a similarly large sample size in order to achieve representativeness, as discussed next (Bearden, Sharma, & Teel, 1982; Groves et al., 2009).

A review of literature showed that most MHL researchers employed a 95% confidence interval and .80 power to determine appropriate sample sizes (Jorm, 2012; Reavley & Jorm, 2011a; Yoshioka et al., 2014). Examination of previous results of MHL studies consistently showed outcomes of medium effect sizes (Mathews, 2008; Noort et al., 2011; Payne, 2009; Reavley & Jorm, 2011a; Yoshioka et al., 2014). Other researchers investigating clergy participants and using 95% confidence levels, and .80 power also found medium effect sizes (Hedman, 2014; Noort et al., 2012; Pickard, 2011). Fitting with the current literature base, I decided to use similar figures for the power

analysis. I used the statistical software, *G-Power* (Faul, Erdfelder, Buchner & Lang, 2009), to conduct the power analysis for the current dissertation study. I entered into G-Power a 95% significance level ($\alpha = .05$), .80 statistical power (1- $\beta = .80$), and medium effect sizes ($f = .25$ or $f = .15$) for the two different statistical methods (i.e., one-way ANOVA and multiple linear regression, respectively).

For Question 1 and subsequent ANOVA, a 95% significance level ($\alpha = .05$), .80 statistical power (1-β =.80), and medium effect size ($f = .25$) for one-way comparison of four groups required about 180 respondents, according to G-Power (Faul et al., 2009). For Questions 2 and 3, I ran sample size analysis for conducting multiple regression analyses on the collected data. By incorporating 95%, significance level (α=.05), .80 statistical power (1 - $\beta = .80$), and medium effect size ($f = .15$), the study's sample size required at least 77 respondents, according to G-Power (Faul et al., 2009).

Further evidence for setting these approximate sample sizes emerged from the empirical data from previous MHL research. In exploring sample sizes from religious studies, sample sizes between 48 and 150 clergy participants were common (Ali et al., 2005; Chevalier et al., 2015; Pillion et al., 2012; Noort et al., 2012). Specific examples included James et al. (2014) who used 103 clergy participants and Kane and Green (2009) who surveyed a sample of 143. Pillion et al. (2012) and Noort et al. (2012) conducted regression analyses with clergy participants and used between 100 and 150 participants. In fitting with the sample sizes from these studies, this dissertation research utilized ANOVA and multiple regression data analysis and, respectively, at least 180 and 77 participants, according to power analysis. To further understanding of the collected

data, I also analyzed the data with descriptive statistics (i.e., percentages, means, and standard deviation) to show MHL rates according to demographic and educational variables, as has been conducted on data from other MHL studies (Jorm, 2012; Wright et al., 2012).

For the ANOVA (i.e., Question 1), 180 participants was the suggested sample size for achieving satisfactory power among four groups, according to power analysis. For Question 1, I also analyzed the data with descriptive statistics to show MHL rates (in percentages) according to denominational affiliation, as has been conducted by other researchers investigating clergy participants and MHL (Milstein et al., 2000; Noort et al., 2012; Pickard, 2012). I did not identify any other MHL studies employing ANOVA for denominational comparisons. Given that this study was the first to examine MHL rates of a national sample of clergy and compare denominational groups via ANOVA, I also examined additional clergy studies that employed ANOVA to justify the sample size, as discussed below.

Investigating clergy perceptions of depression and referrals, Hedman (2014) employed one-way ANOVAs to investigate mean differences for provision of counseling hours among six denominations. Hedman (2014) surveyed 270 participants to achieve necessary power to make significant comparisons. Administering four different email and physical mailings, Pickard (2012) surveyed 524 clergy participants to satisfy power analysis for conducting ANOVAs on data from six different denominational groups. These two examples provided additional support for choosing a larger sample size, as compared to typical religious studies, for this dissertation study. For conducting an

ANOVA with four groups, the power analysis results drawn from G-Power (Faul et al., 2009) further supported the choice of the larger sample size (n = 180).

Because response rates to email surveys can be as low as 15%, I first invited 2000 clergy to participate in order to achieve the sample size goal (Baruch & Holtom, 2008). Due to my not repeating email invitations to participants, I had to administer further email invitations to new sets of potential participants, as I had anticipated via previously researched web-based research strategies (Millar & Dillman, 2011). After I sent the first round of surveys to the first 2000 potential participants, I received responses and recognized the need for a second and, then, third round of mailings. After two weeks of data collection, the final response number satisfied the recommended sample size for both the one-way ANOVA and multiple linear regression analyses in this study.

Procedures for Recruitment, Participation, and Data Collection

After receiving approval by International Review Board (IRB; Approval # 04-07-16-0260783), I randomly selected 6000 potential participants from the precompiled and verified list of church contacts (APC Services, Ltd., 2016). I used the Microsoft excel spreadsheet and the *RAND* function to randomly select the email addresses of unnamed clergy members (Microsoft Excel, 2016). I sent an email to the first 2000 of the randomly selected list members inviting them to participate in the study (See Appendix B). In the invitation, I detailed the general purposes of the study, informed consent processes, and additional consent policies, as well as potential limits to confidentiality with descriptions of how their information would be protected (ACA, 2014; Millar & Dillman, 2011). For ethical and practical reasons, I described these procedures and

policies in clear and simple language (ACA, 2014; Dillman, 2011). Since I did not receive the sample size of 180 after the first mailing, I was required to send invitations for a second and, later, third round of randomized, web-based mailings.

Those participants willing to participate in the study clicked on the link to the informed consent document, which was read and box-checked *yes* to confirm assent. Informed consent included the following descriptions: confidentiality safeguards and risks, purposes/procedures of the study, potential risks and benefits of participation, limitations of the study, plans for dissemination of findings, and the voluntary nature of participation and completion of the survey (Appendix C). To honor ethical expectations, I communicated with potential participants the goals of the research project. As both a licensed MHP and licensed pastoral counselor/clergy member, I disclosed my professional memberships and demonstrated transparency to assure clergy participants of my unequivocal respect for both professions (ACA, 2014). To encourage inter-professional collaboration and training resources, I also provided at the end of the study a Web address link for participants to read the final results of the study, which they will be able to access anonymously.

Once participants signed the informed consent, instructions on the web-based survey directed participants to the demographic questionnaire created for this study (Appendix D). In the demographic questionnaire, I explained the delimiters of the sample population and provided additional information regarding participants. The survey began with nine demographic and educational questions asking participants' age, gender identity, geographical location, denominational affiliation, number of years of

post-secondary schooling, highest level of education, degree type, number of years in ministry, and how many courses, if any, of MH training they had completed. I included these specific questions in the demographic questionnaire because behavioral model theorists have shown these predisposing demographic variables consistenly impacted MHL rates (Andersen, 1995; Pescosolido, 2013) and conceptual foundations of MHL (Jorm, 2012). Slight differences in the demographic questionnaires from various MHL studies reflected differences in the research questions. Overall, the choice of these demographic and educational variables as potential predictors for my dissertation study fit with previous religious studies and remained grounded in the literature base (James et al. 2014; Noort et al., 2012; Sullivan et al., 2013). After completing the demographic questionnaire, the survey instructions directed participants to the MHLS (Appendix F).

The MHLS instrument assesses clergy rates of MHL and presents several depictions of SMI and resulting attitudes, beliefs, and behavioral choices. Although this study involved minimal risk, I considered participants' unidentified psychological issues, potential issues which survey researchers have posited might prompt emotional or psychological discomfort or reactions (American Association for Public Opinion Research [AAPOR], 2010). Therefore, I included follow-up resources at the end of the survey questionnaire (Appendix G). In case questions or feelings of distress emerged, I also provided web links to the Association of Spiritual, Ethical, and Religious Values in Counseling (ASERVIC) website and ACA website for training opportunities and wellness resources. In addition, the researcher's email address remained available for questions and concerns. Finally, in order to maintain privacy and confidentiality, I

included a link at the end of the survey by which participants can access the results of the study anonymously.

At the completion of the data collection, I inputted the anonymous data from Survey Monkey into statistical software for analyses. According to the IRB application (2015), "anonymous data contains absolutely zero identifiers and makes it impossible to determine who participated and who did not" (p. 11). When data returned via Survey Monkey, the email addresses were not attached to the data so that I could not know who responded to the survey or completed the questionnaires. At my procedural request, Survey Monkey reported the data with no identifying information and did not track non-responders for follow-up, ensuring that the collected data remained anonymous.

Instrumentation

The MHLS (O'Connor & Casey, 2015) is a 35-question scale-based measure that examines MHL with one total score and may be useful for identifying communities with low MHL so that improved education and support can be provided (O'Connor & Casey, 2015). O'Connor and Casey (2015) also described how researchers could use the measure assess the helpfulness of various educational campaigns. The instrument creators administered the survey via web-based formats, thereby validating the survey for web-based administration (O'Connor & Casey, 2015). Additionally, the MHLS has good internal and test-re-test reliability and validity, which I discuss later in the chapter. Int he pilot studies for the MHLS, mental health professionals and those with previous experiences with mental illness demonstrated greater MHL, which reflected consistency with MHL prior research (Caldwell & Jorm, 2001; Lauber et al., 2005; Merritt et al.,

2013; O'Conner & Casey, 2015). Furthermore, help-seeking behaviors positively correlated and psychological distress did not correlate with higher rates of MHL, divergent findings that fit the current conceptual framework of MHL (O'Conner & Casey, 2015; Smith & Shochet, 2011).

To create the MHLS, O'Connor and Casey (2015) used a panel of psychologists to operationalize the definition of MHL, which led to a reduction from seven to six attributes due to insufficient evidence for differentiating two of the attributes. The research team and clinical panel generated items for each of the remaining attributes and piloted the resulting 79 questions to a community sample of 202 individuals. Due to the results of a discriminatory analysis, researchers excluded 28 items and reversed other items for accuracy. O'Connor and Casey (2015) also employed a Likert-response format for ease of administration.

Following the Phase I pilot-testing, the MHLS-Pilot (MHLS-P) consisted of 51 items that inquired about the following: (a) the *ability* "to recognize disorders" (21 items), (b) the *knowledge* "of where to seek information" (4 items), "risk factors and causes" (2 items), "self-treatment" (2 items), and "professional help available," (5 items), and (c) the *attitudes* "that promote recognition or appropriate help-seeking behavior" (17 items), (O'Connor & Casey, 2015, p. 3). Larger numbers of items per category reflected the more comprehensive attributes. The MHLS-P was administered to 372 community members and 43 health professionals along with demographic questionnaires, mental health history inquiries, the General Help-Seeking Questionnaire (GHSQ) (Wilson et al., 2007), and the Kessler Psychological Distress Scale (K10) (Kessler et al., 2002). The

results of two separate factor analyses demonstrated that the proportion of variance explained by other factors was low (factor loadings between .16-.24), thus supporting the current univariate structure as "statistically and theoretically appropriate" (O'Connor & Casey, 2015, p.3). To reduce the number of items, researchers removed any items that, when included in the analysis, resulted in unacceptable Cronbach's alpha. The final alpha level of the instrument was .873. Test-re-test reliability showed good reliability (r (60) = .797, $p < .001$), with the final version of the MHLS including 35 items.

During Phase 3, O'Connor and Casey (2015) examined the descriptive data and validity of the MHLS. The scale was "somewhat normally distributed" (skewness - .115, kurtosis -.231) and demonstrated readability (i.e., grade level 7.6). Discriminant validity was shown by the significantly higher MHL scores by the professional group (M = 145, SD = 7.19) than the community sample (M = 127.38, SD = 12.63). Construct validity was demonstrated by significant positive correlation between the GHSQ (i.e., testing help-seeking behaviors) and the MHLS (r (370) = .234, $p < .001$). The finding of no significant correlation between the K10 and MHLS (r (370) = -.087) showed that the MHLS did not significantly relate to levels of psychological distress, which fits with the conceptual framework of MHL.

Using the COSMIN quality rubric, O'Connor and Casey (2015) examined the methodological integrity of the MHLS (Mokkink et al., 2010). As a result, six of the nine domains demonstrated adequacy, including internal consistency, reliability, measurement error, content validity, structural validity, and hypothesis testing. Due to the lack of other parametric MHL measures, researchers did not assess the criterion validity of the MHLS.

Furthermore, researchers are currently assessing the instrument's cross-cultural validity and responsiveness (O'Connor & Casey, 2015). The brevity of the scales resulted in some limitations in terms of the comprehensiveness of the questions to test the full construct of MHL; however, the researchers addressed some of these concerns by using multiple sources to guide item development. In a personal communication (January, 7, 2016), L. Casey granted me permission to use the MHLS via a web-based format, which remains the intended mode of administration (O'Connor & Casey, 2015). A copy of this communication and the author's authorization to change references of *Australia* to the *United States* is included in Appendix E.

Data Analysis

In this study, I used the general linear model (GLM) as the statistical basis for analyzing the collected data. To conduct analyses, I used Individual Business Managements (IBM) *SPSS* software version 23 (IBM, 2016). Administration of the MHLS (O'Connor & Casey, 2015) provided parametric data that allowed for ANOVA and linear regression analysis. The GLM was the appropriate model for conducting analyses on data at the interval level, which corresponded with the level of the survey data and hypotheses from this study (Field, 2013). Below, I list the research questions and hypotheses for review.

Review of Research Questions and Hypotheses

Research Question 1: Is there a significant difference in mental health literacy scores, as measured by the MHLS (2015), among Christian clergy of different denomination-types?

$H_0$1: There are no significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 = \mu 2 = ... = \mu k$

$H_1$1: There are significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. H0: $\mu 1 \neq \mu 2 \neq ... \neq \mu k$

Research Question 2:To what extent, if at all, do educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0$2: Educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), do not predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1$2: At least one of the predictor variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States? H1: At least one $\beta 1 \neq 0$, $p \leq .05$

Research Question 3: To what extent, if at all, do demographic variables (*age, gender orientation, geographical location*) predict significantly higher scores of mental

health literacy, as measured by the MHLS (2015), for Christian clergy in the United States?

$H_0$3: Demographic variables (*age, gender orientation, geographical location*) do not predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H0: $\beta 1 = \beta 2 = \beta 3 = 0$

$H_1$3: At least one of the predictor variables (*age, gender orientation, geographical location*) predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the United States. H1: At least one $\beta 1 \neq 0$, $p \leq .05$.

Analytical Procedures

For data analysis, I began by inputting data into IBM *SPSS* software version 23. For statistical analyses between predictor and outcome variables, I first screened the data to ensure participants completed the surveys in their entirety. I identified units with any missing information required for analytical purposes and removed them from the data. I then scored the MHLS scores of the participants, checked the reliability coefficient, and compared the mean scores to that of the benchmark samples drawn from the original pilot study for the instrument (O'Conner & Casey, 2015).

For the first research question, I employed ANOVA to determine whether any significant differences emerged among the four groups of clergy according to their denominational affiliations. To do so, I first ran analyses to ensure that data meet the statistical assumptions. These included linearity (i.e., using P-P plots), independence of observation, normal distribution of the residuals (i.e., using histograms, skewness, and

kurtosis), and homogeneity of variance (i.e., using the Levene's test) (Field, 2013). Then, I conducted the ANOVA and found the related sum of squares (SS), degrees of freedom (*df*), mean square error, F-Statistics, and significance levels (*p*-values < .05) for significant between-subject differences in MHL. I also ran the Kruskal-Wallis test to confirm the results. In Chapter 4, I report these findings and a summary of descriptive statistics in the form of percentages, means, and standard deviations and describe the data with appropriate charts.

For research questions 2 and 3, I employed standard and stepwise multiple linear regression analyses to determine which, if any, predictor variables predicted MHL scores and for how much variance the predictors accounted. First, I used distribution plots to determine skewness and kurtosis and check for outliers. (Field, 2013). Then, I used scatter plots to check the assumptions of linearity, independence of errors, and homogeneity of variance. Finally, I examined multicollinearity to determine whether the relationships between predictor variables impacted the overall analysis. To do so, I conducted analyses to determine variance inflation factors (VIF) scores for the individual predictor variables.

After testing these statistical assumptions, I ran the regression analyses and found the model summaries for the standard and stepwise linear regressions, including variance (R^2), adjusted variance (Adj.R^2), *F*-statistics, and *p*-values. I report these findings and summaries of the data for the individual predictor variables, including unstandardized Beta (ß), standard error of the mean for unstandardized ß, standardized ß, and *p*-values (*p* < .05), in Chapter 4. I also provide descriptive statistics in the form of percentages,

means, and standard deviations and describe the data with appropriate charts. As a final exploratory check, I also conducted a stepwise linear regression with all the predictor variables to ensure I had indentiefied the most appropriate model. I discuss these results at the end of chapter 4.

Addressing Internal and External Validity

Regarding external validity, some concerns emerged with the current method for this investigation. Using pre-complied lists of participants adds inherent threats to any study's validity (Wiles et al., 2005). The list I used was a nonprobability list with similar qualities of pre-compiled panels, which have limits in regard to external validity (i.e., generalizability) (Baker et al., 2010; Wiles et al., 2005). Although panel research is a growing field, no gold standard for research strategies on pre-compiled panels or lists have thus far emerged social science research (Baker & Downes-LeGuin, 2007). The American Association for Public Opinion Research (AAPOR) (2010) is a leading research group on the design and administration of survey research. Using the International Organization for Standardization, (ISO; 2009) standards, AAPOR recommended the following for reducing threats to validity: (a) avoid non-probability panels when estimating population parameters; (b) review how the panel was compiled with reference to the company profile, sample source , and panel recruitment and management; and (c) verify data quality and validation. To that end, I investigated recognized lists of clergy members and identified the APC list, which currently meets the overall standards of panel research, as discussed next (APC Services, Ltd., 2016).

Concerning external validity, the process of compiling *opt-out* lists can result in nonresponse bias and includes concerns with (a) recruitment, (b) profiling, (c) specific study sampling, and (d) panel maintenance (Baker et al., 2010). Opt-out lists contain contact information on non-volunteers who later decide to participate (*opt-in*) or unsubscribe (*opt-out*) from the list (Wiles et al., 2005). Managers of these lists must demonstrate compliance with anti-spamming laws and remove unsubscribing members from lists within 10 days of opting-out (US Federal Trade Commission, 2008). For my study, I found that APC researchers provided thorough information regarding sampling, profiling, maintenance, and recruitment, all which met legal requirements and commonly accepted standards of using research panels (APC Services, Ltd., 2016; Baker et al., 2010).

In terms of validity, the resulting list contained only members who have not *opted-out* and may be more eager to respond to surveys. Researchers have found generalizability limitations due to the *opting-out* option (Wiles et al., 2005). However, opting-out choices ensure compliance with federal regulations and non-coercion requirements for potential participants, which remain primary ethical mandates (ACA, 2014). Therefore, I could not avoid these external validity risks.

Concerning the study's internal validity, the cross-sectional survey design method avoids some of the threats involved in experimental designs, including history, maturation interaction, and experimental mortality (Creswell, 2013). For this dissertation study, threats to internal validity involved testing effects of the web-based survey and lack of controls regarding the test environment, as described earlier (Groves et al., 2009).

Additionally, because of the use of non-experimental design, I could not examine causal relationships (Field, 2013). However, the cross-sectional design, which I used for this study, remains the most feasible option for measuring property-disposition relationships (Frankfort-Nachmias & Nachmias, 2012). Regarding threats to construct validity, I previously addressed the limitations related to the MHLS (O'Connor & Casey, 2015) in the *Instrumentation* section. Overall, repeated administrations of this new MHL instrument may overcome some of the potential construct limitations.

Ethical Concerns

As detailed in the Procedures for Recruitment, Participation, and Data Collection sections, I took care to maintain the integrity of the informed consent processes, including the procedures for participation, voluntary nature of the study, anonymity of the data collection, risks and benefits of participation and online administration, and reporting of results (ACA, 2014). In the email invitation, I explained that the study was voluntary and required several steps to access the questions, steps that included their clicking on the link and completing the informed consent process. I also listed the potential benefits and risks of participation in the informed consent (See Appendix C). Although I identified no foreseeable risks, I included web links to mental health information and resources at the end of the survey (See Appendix G).

By using confidential web-based databases to collect the data, I did not know who responded to the email invitation and completed the survey. I only had access to the data, thereby maintaining the anonymity of participants at all times. Furthermore, I did not repeat invitation mailings to avoid tracking who responded and maintain the anonymous

nature of the study. I also reported the findings collectively to protect individual privacy and the anonymity of the data collection processes. I store the data on my password-protected computer in a locked office. Only the researchers and authorized accountability representatives from Walden University were able to review this data. I will store the data for five years as per Walden University and ethical requirements (ACA, 2014). I now provide discussion regarding additional ethical considerations involved in utilized pre-compiled lists of online participants.

The data collection process involved in drawing the list of potential participants reflected in current legal and ethical standards (Baker et al., 2010). As discussed earlier, I drew the sample from a pre-compiled list of 109,000 clergy members from across the US. Many pre-compiled and panel research groups do not provide extensive information on how they gather contact information (Baker & Downes-LeGuin, 2007). However, research organizations compiling such lists have the following generally accepted responsibilities: (a) to disclose to members that they are part of the finalized list, (b) to obtain the permission to collect and store their information, and (c) to maintain records of member activity (Baker et al., 2010).

To ensure ethical compliance to these general standards, I disclosed to the participants that they were part of the precompiled list of clergy contacts and named the list-maintenance organization for them to contact in case they wanted to unsubscribe (Baker et al., 2010). Rather than continually tracking participants, as expected of panel researchers, I kept their information anonymous and only utilized data for this dissertation study. As such, the full informed consent process described the method of

obtaining their information and verifying their agreement to be part of the study (ACA, 2014).

Furthermore, the informed consent information explained that, if they choose to participate (i.e., *opt-in*), participants had to click on a link to access the survey, as has been suggested in ethical compliance research (Wiles et al., 2005). The intent of this additional step was to protect participants from feeling coerced into viewing or participating in the study (Wiles et al., 2005). Finally, I concluded the survey with final remarks by which I thanked participants, provided web addresses and information for mental health resources, and repeated instructions about accessing the link to obtain the results of the study (See Appendix G).

Conclusion

This study involved a quantitative, cross-sectional survey design utilizing web-based data collection methods. I randomly selected participants from a sampling frame of 109,000 clergy members from across the US and, after detailing the informed consent process, administered the MHLS (O'Connor & Casey, 2015) and demographic questionnaire via web-based administration. With the anonymous data inputted into *SPSS* (IBM, 2016), I conducted ANOVA and standard multiple linear regression analyses to determine the relationship between demographic and educational predictors and MHL of clergy participants. I carefully considered potential ethical issues and detailed any limitations of the results due to the use of non-experimental design. In Chapter 4, I discuss the results of the data analyses.

Chapter 4: Results

The purpose of this quantitative, cross-sectional survey research was to investigate the MHL rates of Christian clergy across the US and to help bridge the gap in understanding clergy's collaboration and referral behaviors. Based upon the behavioral model theories of health literacy (Andersen, 1968, 1995), I nominated several predictor variables, including age, gender identity, geographical location, and denominational affiliation, for exploration and examination. Additionally, I investigated three educational variables, which included the number of years of post-secondary school, earned degree-type, and completed number of clinical mental health (MH) training courses, in relation to MHL scores. I measured these seven variables in relation to MHL scores of clergy participants. Using O'Conner and Casey's (2015) MHLS, I measured a national sample of Christian clergy on their ability to (a) correctly label various mental health disorders, (b) recognize risk factors and causes, (c) identify where to seek information about mental health issues, (d) understand appropriate self-help methods, (e) recognize effective types of professional help, and (d) demonstrate attitudes that promote help-seeking behaviors, as described and measured by the scales within the MHLS (O'Conner & Casey, 2015).

The first research question was: Is there a significant difference in MHL scores, as measured by the MHLS (2015), among Christian clergy of different denomination-types? My alternative hypothesis was that there would be significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS (O'Conner & Casey, 2015). The second question was: To what extent, if at all,

do educational variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and completed number of clinical MH training courses (in whole numbers), predict significantly higher scores of mental health literacy, as measured by the MHLS (O'Conner & Casey, 2015), for Christian clergy in the US? My alternative hypothesis was that at least one of the predictor variables, including post-secondary years of schooling (in whole numbers), degree-type [*divinity, mental health, other*], and number of clinical MH training courses (in whole numbers), would predict significantly higher scores of mental health literacy, as measured by the MHLS (O'Conner & Casey, 2015), for Christian clergy in the US? The third and final research question was: To what extent, if at all, do demographic variables (age, gender identity, geographical location) predict significantly higher scores of mental health literacy, as measured by the MHLS (O'Conner & Casey, 2015), for Christian clergy in the US? My alternative hypothesis was that at least one of the predictor variables (age, gender identity, geographical location) would predict statistically significantly higher scores of mental health literacy, as measured by the MHLS (O'Conner & Casey, 2015), for Christian clergy in the US. In this chapter, I first review the purpose, research questions, and hypotheses for the study. Then, I discuss the data collection processes, results, and general summaries.

Data Collection

For a duration of two weeks in April 2016, I followed the IRB-approved data collection procedures, as indicated in the methods sections. In three rounds of 2000 e-mail invitations each, I used Survey Monkey to invite approximately 6000 randomly

selected Christian clergy members from across the US to participate in the online survey. To reach the appropriate sample size and reliably conduct the analyses, I required at least 180 participants to complete the full survey. After the first round of invitations, I received approximately 84 completed surveys with 59 other invitations indicating the *bounce-back*, *opt-out,* or *incomplete* option. After the second round of invitations, I received an additional 54 completed surveys, with 52 others indicating bounce-back, opt-out, or incomplete status. Given the statistical necessity for participants to complete the full MHLS, the number of completed surveys (n = 138) at this point required me to send additional invitations for participation in order to reach the target sample size ($N \geq 180$). The final round of invitations garnered 100 additional completed surveys, with 59 others indicating bounce-back, opt-out, or incomplete status, for a total of 238 completed surveys, or 4.0% response rate. This response rate is slightly lower than the approximate response rates (i.e., 5% average response rate) reported by Survey Monkey (2016). Given that response rates for pre-compiled lists of email contacts can be lower than response rates from mailed surveys (Baker et al., 2010), this response rate was not unexpected, and I collected the necessary sample size ($N \geq 180$) according to the intended data collection procedures. Respondents and participants reported no breaches of confidentiality, anonymity, or ethical concerns.

Descriptive and Demographic Characteristics of the Sample

In Tables 1 and 2, I provide charts of the continuous and categorical variables, respectively, that describe the demographic and educational characteristics of the sample of 238 Christian clergy participants. As reported in Table 1, most clergy respondents

(83.6%) were between the ages of 35 and 64 with the majority of participants (*n* = 83) reporting an age between 55-64, followed by 66 participants reporting an age between 45-54 and 50 participants reporting an age between 35-44. The average age of the participants was 50.7 years with a standard deviation of 11.6 years. Of the 238 participants, 68.1% were male (*n* = 162) and 31.9% were female (*n* = 76). As shown in Table 2, regarding geographical location, 31.1% of clergy participants lived in rural areas (*n* = 74) and 68.9% lived in urban areas (*n* = 164).

Table 1

Mean, Range, and Standard Deviation for Continuous Study Variables

		Range		
Predictor Variable	*M*	Minimum	Maximum	*SD*
Age	50.68	25	86	11.61
Number of Clinical MH Training Courses	4.63	0	60	7.56
Number of Years of Post-Secondary School	7.95	0	20	3.09

Note. $N = 238$

As shown in Table 2, 49.6% of respondents were of the Evangelical Protestant denomination (*n* = 118), followed by Mainline Protestant at 32.8% (*n* = 78), Catholic at 16.4% (*n* = 39), and Historically Black Protestant at 1.3% (*n* = 3). The majority of respondents (95.4%) completed at least two years of post-secondary school (*n* = 227), with 79.8% of them earning a masters or doctorate degree (*n* = 189). Most respondents

(n = 217) pursued either a divinity or other non-mental health degree while only 8.8% earned a degree in mental health (n = 21). More specifically, 158 earned a divinity degree, 21 earned a mental health degree, and 59 earned a degree that was neither divinity or mental health-related (i.e., *other*). As shown in Table 1, regarding completion of counseling courses, 192 respondents, or 80.7%, had taken five or fewer mental health (MH) training courses with 15.5% who reported never having taken any MH training courses (n = 37). Approximately 19.3 % of respondents (n = 46) reported taking six or more counseling-related courses in their pastoral careers.

Table 2

Frequencies and Percentages for Categorical Study Variables

Variables	*n*	*%*
Denominational Affiliation		
Evangelical Protestant	118	49.6
Mainline Protestant	78	32.8
Historically Black Protestant	3	1.3
Catholic	39	16.4
Gender Identity	*n*	*%*
Male	162	68.1
Female	76	31.9
Other	0	0.0
Geographical Location	*n*	*%*
Urban	164	68.9
Rural	74	31.1
Degree-Type	*n*	*%*
Divinity	158	66.4
Mental Health	21	8.8
Other	59	24.8

Note. $N = 238$.

Proportional Comparison to the Larger Population

Some of the initial challenges in designing this study involved the discrepancies in the number and type of Christian clergy in the US. The US Bureau of Labor and Statistics (2011) found 48,020 total clergy members while the Hartford Institute for Religious Research (2015b) reported clergy membership of at least 600,000. These differences in number emerged because of the lack of a common definition of *Christian clergy* (Harford Institute for Religious Research (2015b). Therefore, I relied on the broadest definition and utilized a non-probability sampling method with a large sampling frame of 109,000 contacts in order to draw a representative sample. I now discuss how the demographic characteristics of the sample from this study represent the known statistical data on the larger population of Christian clergy in the US.

According to the Pew Research Center (2015), over 70% of US citizens attend Christian churches with the following memberships: 25.4% Evangelical Protestant, 14.7% Mainline Protestant, 6.5% Historically Black Protestant, and 20.8% Catholic. All other affiliations each represent less than 2% of US church attendees. Although no definitive data reflected the exact number of Christian clergy attending to each of these affiliations, the four denominational categories represent the four largest groups of clergy members in the US (Hartford Institute for Religious Research, 2015b). The sample in this study had the largest number of respondents reporting Evangelical Protestant affiliation, followed by Mainline Protestant, Catholic, and Historically Black Protestant.

For the purposes of this study, I chose the four largest categories of church affiliation in order to reflect the current literature and classification categories. As a

result, the respondents to my study reflected three of the four groups with robust numbers while only three respondents reported themselves as Historically Black Protestant. It should be noted that professional literature indicates that Historically Black Protestant groups often classify themselves as a subgroup of the Evangelical, and at times, Mainline Protestant affiliations, and include the Southern Baptist and African Methodist-Episcopalian (AME) church traditions (Hartford Institute for Religious Research, 2015b). The literature (Pew Research Center, 2015) pointed to this overlap between Protestant group categories, and this commonality may offer a potential explanation for the low sample size for the Historically Black Protestant category. In future studies, researchers may delimit more specific denominational categories in order to examine differences according to named church groups. For the purposes of this study, however, the question regarding denominational affiliation met all required statistical assumptions, which I discuss in the analysis section for research question 1 (RQ1).

Regarding age and gender, the demographic, predictor variables were proportional to known statistics regarding US clergy members. The 2015 National Survey of Congregations (Roozen, 2015) reported that the mean age of clergy was 56.1 years old. In a recent study of 204 Protestant pastors in California, the sample of clergy included 50% of participants between the ages of 50 and 65 (Payne, 2013). In this study, 52.5% of participants were also between ages of 50 and 65, comparable to the age findings in the Payne (2013) study. Ages of clergy participants in research seem to be, on average, slightly lower than the national figure for working clergy. In a study examining Minnesota clergy and their referral patterns, for example, Hedman (2014) reported that

the mean age of the clergy sample was 52 years old (*SD* = 11.3). In my study, the mean age was 50.7 years (*SD* = 11.6), showing that the age of the sample was similar to other clergy samples and proportional to the approximate, known population of US clergy members.

Further examining the age of the clergy sample in the current study, I followed Field's (2013) recommendation to compare continuous variables with the statistically, normally distributed population. For continuous and discrete data sets, Field (2013) posited that the standardized scores for measures of skewness and kurtosis should not be greater than +/-1.96 (p = <.05). The age variable showed a normal distribution with a skewness of -.243 (*SE* = 1.58) and kurtosis of -.594 (*SE* = .314).

The 2015 National Survey of Congregations (Roozen, 2015) reported that 12% of head clergy members in the US were female as compared to the 31.9% of female participants responding to this dissertation survey. As another point of comparison with gender identity and pastors, Payne's (2013) sample included 14% female participants, which also did not include general clerical leaders or teachers. As a potential explanation for the difference in statistics, I did not delimit participation to only lead clergy and included church staff members from any professional position. Therefore, I posit that the number of female clergy who are not lead pastors may be significantly larger than 12%-14%.

I consulted the Hartford Institute for Religious Research (2015b) survey data for additional gender comparisons. Although that study did not include gender findings for clergy from any type of clerical role, the results showed that one-third of all seminary

students (33.3%) were female. Under comparison with the Hartford Institute's finding, I posit that the 31.2% of female respondents to the current study generally reflected the approximate clergy population involving any category of clerical leader or teacher. Furthermore, Hedman's (2014) recent study of clergy and their referral patterns resulted in a sample that included 27% female and 73% male, further verifying the gendervariable in the current study. As a suggestion for future studies, researchers could challenge the descriptive findings in this dissertation study by collecting data from only lead clergy or by having participants specify their clerical roles.

Regarding geographical location, I found no other researchers who measured the number of rural versus urban clergy members at the national level. Some researchers reported the geographical characteristics of a single state (Hedman, 2014; Pillion et al., 2012) or area (Payne, 2013), or purposefully chose rural clergy as their particular geographical variable (Kirchner et al., 2011; Stansbury et al., 2011). In previous studies, the majority of clergy seemed to reside in urban areas versus rural locations at a 3:2 ratio (Hedman, 2014; Payne, 2013), which approximately compares with the geographical statistics in my study (i.e., 68.1% urban).

At the national level, researchers routinely report on geographical locations by the size and placement of faith communities, rather than by number of clergy numbers (Roozen, 2015; Hartford Institute for Religious Research, 2015b). The 2015 National Survey of Faith Communities (Roozen, 2015) did report that 65.1% of churches, by count, were in rural areas, thereby showing the importance of rural clergy members. In terms of the number of clergy per geographical location, however, the number of all

clergy (i.e., not just lead clergy) would likely follow attendance rates rather than number of churches. For example, the Hartford Institute (2015b) found that 50% of church attendees belonged to the top 10% of US megachurches, which largely exist in urban areas. Therefore, the number of clergy serving in various locations would likely reflect the number of church members rather than the number of physical church locations. Given that explanation and the large sample size of the sample (i.e., ≥ 30; Field, 2013) in this study, the proportions of rural/urban clergy in this study likely reflect current church attendance trends and a relatively normal distribution.

For the educational variables, I found that the number of years of schooling or degree type fluctuated among studies. Although Catholic and Mainline Protestant churches typically expect a certain level of education for head clergy (e.g., Masters of Divinity from their respective seminaries), the same expectation may not be accurate for the Evangelical traditions (Bledsoe, Setterlund, Adams, Fok-Trela, & Connolly, 2013; Perl & Chang, 2000). Furthermore, many clergy members pursue first careers before entering the ministry and do not hold Masters of Divinity degrees (Suchoki, 2013). Payne (2013) labeled the education of clergy as "diverse" and spanning 35 different degree-types (p. 1404). With such diversity, 69% of Payne's (2013) sample had received at least a bachelor's degree and, with about 50% holding a Master's degree in theology. Hedman (2014) found that 83% and 80% of respondents had completed a bachelor's degree and Masters of Divinity degree, respectively. However, Payne (2013) and Hedman (2014) collected data from particular geographical areas while I collected data from a national sample. Therefore, direct comparisons may not be appropriate.

In this study, I measured years the number of years of post-secondary school on numerical, continuous scale. This clergy sample was generally highly educated, with 79.8% of respondents with over six years of post-secondary school. The number of years of post-secondary school was non-normally distributed, with skewness of .743 (*SE* = 0.158) and kurtosis of 1.390 (*SE* = .314). The majority (*n* = 158) held degrees in divinity education, which generally reflected the educational variables from the previous research (Hedman, 2014; Payne, 2013). Therefore, the non-normal distribution was not a concern for the current study.

I also compared the number of MH training courses completed by the clergy in this sample to those of previous clergy samples. Researchers have noted that the number of MH training courses required of clergy of different faiths is not a uniform number (Bledsoe et al., 2013). Ali and Milstein (2012) found that approximately 66% of Mainline Protestants, 40% of Catholics, and 33% of Evangelical Protestants had taken at least one counseling-related course. These figures, however, may not reflect a national sample of clergy. Hedman's (2014) examination of Minnesota clergy showed that 20% had taken some continuing education in mental health studies, with 41% of them indicating receiving a "moderate amount" of counseling preparedness (p. 298). In examining the education of a 204 Protestant pastors from California, Payne (2013) found that the 25% of counselors completed some pastoral counseling training. Payne (2013) also found that 71% of clergy from the sample Protestant denominations strongly believed they had not received enough training in MH issues and desired additional training in MHL. In response to studying the preparedness of clergy to deal with MH

issues, Ross and Standford (2014) examined 71 divinity schools in North America and found that 31% of them offered course work specifically dedicated to MH training.

In this current study, the completed number of MH training courses followed a positive skew, which showed that the median number of courses taken (*Mdn* = 3.00) was lower than the mean (*M* = 4.63). Therefore, the data for the number of MH training courses variable was non-normally distributed, with skewness of 4.769 (*SE* = 0.158) and kurtosis of 28.875 (*SE* = .314). This finding conveyed that majority of clergy took a relatively low number of clinical MH training courses, which is not surprising given the participants' profession. In relation to other research, Ali and Milstein (2010) reported that approximately two-thirds of Christian clergy had taken at least one counseling-related course. The data from this study showed that 82% of the sample had taken at least one course, but that the average number of courses remained under five. Additionally, the completed number of clinical MH training courses likely follows the large number of clergy (91.2%) who reported pursuing degrees in subjects other than mental health. Since statisticians posited that a larger sample size (≥ 30) offers some assurance of a normal data distribution for the given population (Field, 2013), I consider the sample a generally reliable reflection of clergy's educational variables.

Results

In this study, I collected data from a large cross-section of Christian clergy in the US for the purpose of analyzing denominational affiliation, educational variables. and demographic variables in relation to mental health literacy scores on the MHLS (O'Conner & Casey, 2015). I provided no treatment or interventions; furthermore,

participants reported no adverse effects from completing the survey. The MHLS is a new parametric instrument; therefore, I relied on the results of O'Conner and Casey's (2015) pilot studies to contextualize the overall findings of the clergy participants.

As summarized by O'Conner and Casey (2015), the mean score of their community sample (M = 127.38, SD = 12.63, 95% CI [126.09, 128.67]) was lower than the mean score of their MHP sample (M = 145.49, SD = 7.19), and the difference between means was significant (M *difference* = -18.1, 95% CI [-20.65, -15.57] was large (d = 1.76). The instrument creators used these scores to draw comparisons with other group-types to determine the validity and reliability of the overall instrument. Their analyses provides some context to the results of my study. In the following section, I briefly characterize the sample from the current study, evaluate the statistical assumptions, and report statistical results with appropriate tables and figures for each of the three research questions. I also provide exact statistics, including probability values and effect sizes, as appropriate to the specific statistical tests.

Research Question 1

I analyzed data for the following research question 1 (RQ1): is there a significant difference in mental health literacy scores, as measured by the MHLS (2015), among Christian clergy of different denomination-types? I presented the following null hypothesis: there are no significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS. I also offered the following alternative hypothesis: there are significant differences between the MHL scores of Christian clergy from different denominations, as measured by the MHLS.

Descriptive statistics for RQ1. As noted in Table 2, 49.6% of respondents were of the Evangelical Protestant denomination (n = 118), followed by Mainline Protestant at 32.8% (n = 78), Catholic at 16.4% (n = 39), and Historically Black Protestant at 1.3% (n = 3). I examined whether significant differences existed between MHL scores of Christian clergy from these four main denominational groups. Since there were more than two categories, I used ANOVA to compare mean differences. Possible scores on the MHLS (O'Conner & Casey, 2015) range from 35 to 160, with 160 being the highest possible score of MHL. In Table 3, I show the descriptive statistics, and individual group means for MHLS scores for Evangelical Protestant clergy (M = 132.73, SD = 11.63), Mainline Protestant clergy (M = 136.37, SD = 9.85), Historically Black Protestant clergy (M = 132.00, SD = 16.46), and Catholic clergy (M = 134.20, SD = 10.83).

Table 3

Descriptive Statistics by Denominational Affiliation and MHLS Scores

					95% CI for *M*			
	n	*M*	*SD*	*SE*	Lower Bound	Upper Bound	Minimum	Maximum
Evangelical Protestant	118	132.73	11.63	1.07	130.61	134.85	106	160
Mainline Protestant	78	136.37	9.85	1.12	134.15	138.59	111	153
Historically Black Prot.	3	132.00	16.46	9.50	91.11	172.89	113	142
Catholic	39	134.49	9.35	1.50	131.46	137.52	117	151
Total	238	134.20	10.83	.70	132.82	135.58	106	160

Evaluation of statistical assumptions for RQ1. Before conducting the one-way ANOVA, I checked the assumptions to ensure the data was acceptable per analytical requirements. First, I checked the reliability of the data set and computed Cronbach's alpha of .85 ($\alpha = .85$) for the full scale measure of MHL. This finding showed an acceptable measure of internal reliability (Field, 2013), which was comparable with the original alpha level of the pilot test ($\alpha = .78$).

One-way ANOVA involves the following assumptions: linearity, normality, homogeneity of variance, and independence of observation (Field, 2013). Prior to checking these assumptions, I looked for any outliers using standardized scores and found that no score for each group was more three standard deviations from the mean,

which researchers use as the cut-off point for outliers (Laureate Education, Inc., 2009). I also did not find any extreme scores when I visually examined the Probability-Probability (P-P) Plot.

The MHLS (O'Conner & Casey, 2015) is a scale-based instrument. Therefore, I could check the assumption of linearity using a visual graph, which, if met, should follow a relatively straight line (Sage Publications, 2013). Analysis of the P-P Plots of MHLS scores showed that each group met the assumption of linearity. Furthermore, I verified the independence of observation assumption by ensuring no data overlapped between groups, and that each of the participants only nominated belonging to one denominational group.

Assumptions of normality propose that the sample has a normal distribution of the outcome variable within each group so that hypothesis testing, confidence intervals, and error variances are accurate (Field, 2013). The assumption of normality also defines whether the sampling distribution is normal, which impacts the normal distribution of the parameter (Field, 2013). To test for normality in larger sample sizes, researchers visually scan histograms and quartile-quartile (Q-Q) plots to compare to the normal distribution curve; additionally, they compare skewness/kurtosis to their respective standard errors and look for a standardized value of less than three standard deviations from the mean (+/- 3.29) (Laureate Education, Inc., 2009). By visually testing the assumption of normality, I found that all four groups followed a normal distribution within the critical value range of three standard deviations. In fact, only one group, Mainline Protestant, fell outside of two standard deviations. However, any significant deviations, even using a

more conservative range, would be acceptable given that (a) the sample size was large enough such that, according to the central limit theorem, the distribution of the sample means should be approximately normal, (b) I found no outliers in any group, and (c) the skewness/kurtosis statistic fell within the +/- 3.29 range (Field, 2013).

Finally, I tested the homogeneity of variance assumption, which determines whether the range of scores around the mean remains similar for all groups (Field, 2013). I conducted the Levene's test for homogeneity of variances and found no significant differences, $F(3,234) = 1.64,)$, $p = .18$, in variances across groups. As shown by the non-significant finding for the Levene's statistic, shown in Table 4, the data met the homogeneity of variance assumption.

Table 4

Test of Homogeneity of Variances for Denominational Affiliations

Levene's Statistic	*df1*	*df2*	*P*
1.640	*3*	*234*	*.181*

Report of statistical analysis for RQ1. After I confirmed that the data satisfied statistical assumptions, I conducted a one-way, between groups ANOVA to compare the effect of denominational affiliation on MHL scores for Christian clergy in the US. As shown by the descriptive statistics in Table 4, Mainline Protestant clergy scored highest ($M = 136.37$, $SD = 9.85$, 95% CI [134.15, 138.59]), followed by Catholic ($M = 134.49$, $SD = 9.35$, 95% CI [131.46, 137.52]), Evangelical Protestant ($M = 132.73$, $SD = 11.63$, 95% CI [130.61, 134.85]), and Historically Black Protestant ($M = 132.00$, $SD = 16.46$, 95% CI [91.11, 172.89]). The results of the ANOVA revealed no significant differences ($F(3, 237) = 1.840$, $p = 1.41$) among the MHL scores of Christian clergy from four

different denominations, as measured by the MHLS at $p \leq .05$ level. Table 5 shows the results of the summary data of the ANOVA for RQ1.

Table 5

Between Groups Effects of MHLS by Denominational Affiliation

ANOVA	SS	*df*	MS	*F*	*p*
Between Groups	641.04	3	213.68	1.84	.141
Within Groups	27167.28	234	116.10		
Total	27808.32	237			

Note. *alpha ≤ 0.05

To ensure no Type II errors emerged, I also ran the Kruskal-Wallis *H* ANOVA Test, which is a non-parametric test researchers use when any violations of normality occurred (Field, 2013). Due to the acceptable (+/- 3.29), yet slightly non-normal, distribution of one of the groups, I conducted the Kruskal-Wallis to confirm the results of the standard ANOVA. Additionally, because the Historically Black Protestant group had so few participants, I reviewed research to check that the ANOVA was robust enough to account for the result even with unequal group sizes. Results of the more sensitive Kruskal-Wallis test were also non-significant ($H = 5.60$, $p = .133$) at the .05 alpha level. Further regarding the small sample size of the Historically Black Protestant group, researchers noted that groups of small sample size with large residual variances should produce accurate results using the traditional one-way ANOVA (Field, 2013). Given the large variance from the group with a small sample size ($n = 3$, $M = 132.0$, $SD = 16.5$) and non-significant findings using both the ANOVA and Kruskal-Wallis *H* ANOVA tests, I

accepted the null hypothesis (H0: $\mu 1 = \mu 2 = ... = \mu k$) for RQ1. Therefore, I did not conduct a Tukey's test or Bonferroni Post Hoc analysis.

In general, the overall mean MHL score for the clergy sample ($M = 134.20$, $SD = 10.83$, 95% CI = [132.82, 135.58]) was higher than the community sample's mean score ($M = 127.38$, $SD = 12.63$, 95% CI [126.09, 128.67]) and lower than the benchmark measure of MHPs ($M = 145.49$, $SD = 7.19$, $N = 43$), as reported by the instrument creators in their pilot studies (O'Conner & Casey, 2015). To compare means from the two different studies, researchers recommend using standardized values, analyzing the sample size, and showing confidence intervals to determine mean differences and effect size (Funder et al., 2014; Stroup et al., 2000). The magnitude of the effect size for the mean differences ($M = 6.92$, 95% CI [.40, .74]) between the clergy sample and the community sample was medium ($d = .57$). The magnitude of the effect size for the mean differences ($M = -8.11$, 95% CI [-1.43, -.75]) between the clergy sample and the MHP sample was large ($d = -1.09$). Although additional research should investigate direct comparisons between clergy, non-clergy, and MHP samples in one study, this general comparison is acceptable via meta-analysis research standards and the use of standardized scores and confidence intervals (Funder et al., 2014; Stroup et al., 2000). Furthermore, the comparison provides a benchmark for understanding the MHL of clergy, as measured on this new instrument.

Additionally, I used standardized values to compare mean scores of each denominational affiliation with the community sample from O'Conner and Casey's (2015) pilot study. Both Evangelical Protestant clergy ($M = 132.73$, $SD = 11.63$) and

Catholic clergy (*M* = 134.49, *SD* = 9.35) scored significantly higher than the community sample (*M difference* = 5.35, *d* = .43, 95% CI [.22, .64]; *M difference* = 6.91, *d* = .5, 95% CI = [.24, .91], respectively), both showing approximately medium effect sizes (according to Cohen, 1988; 1992). Mainline Protestant clergy scored significantly higher (*M* = 136.37, *SD* = 9.85) than the community sample (*M difference* = 8.99, *d* = .74, 95% CI [.49, .99]), showing a medium to large effect size (Cohen, 1988; 1992). Although the mean score for Historically Black Protestant on this study was higher (M = 132.00, SD = 16.46) than the community sample, the mean difference (*M difference* = 4.62) was not significantly different due to the 95% confidence interval values (95% CI [-.77, 1.5]) crossing zero. It should be noted, however, that the small sample size of this group may have impacted the finding. Furthermore, many Historically Black Protestants classify themselves more generally as Evangelical or Mainline Protestants (Pew Research Center, 2015). Therefore, I use caution when interpreting the findings for this latter group.

Research Question 2

For Research Question 2 (RQ 2), I asked the following: to what extent, if at all, do educational variables (years of post-secondary school [in whole numbers], degree-type [*divinity, mental health, other*], and number of clinical MH training courses [in whole numbers]) predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the US? I presented the following null hypothesis: educational variables (years of post-secondary school [in whole numbers], degree-type [*divinity, mental health, other*], and number of clinical MH training courses [by whole numbers]), will not predict significantly higher scores of mental health

literacy, as measured by the MHLS (2015), for Christian clergy in the US? I also presented the following alternative hypothesis: at least one of the predictor variables, educational variables (years of post-secondary school [in whole numbers], degree-type [*divinity, mental health, other*], and number of clinical MH training course [in whole numbers]), will predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the US?

Descriptive statistics for RQ2. For RQ2, I explored three educational variables as potential predictors of MHL. As reviewed in Table 6, the majority of respondents completed many years of post-secondary school ($M = 7.95$, $SD = 7.95$) with nearly 80% having earned a masters or doctorate degree ($n = 189$). Regarding the categorical predictor variable of degree-type, most respondents ($n = 158$) earned a divinity degree, 59 earned a degree that was neither divinity or mental health-related (i.e., *other*), and 21 earned a mental health degree. Although 18.5 % of respondents ($n = 44$) reported taking six or more MH training courses, most clergy did not participate in a large number of counseling-related courses ($M = 4.63$, $SD = 7.56$) with 192 clergy respondents who reported taking less than five courses in their pastoral careers.

With this initial data, I ensured there was no missing data and that I had the appropriate sample size, recommended to be at least 104 plus the number of predictor variables (i.e., 3) for a total of 107 (Laureate Education, Inc., 2009). This study had 238 participants and no missing data, thereby meeting these initial assumptions. I also checked for outliers and ensured that no scores were +/- 3.29 standard deviations from the mean (Field, 2014; Laureate Education, Inc., 2009). In Table 6, I present the

descriptive statistics for the predictor and outcome variables for RQ2. Then I review the assumptions for the multiple linear regression.

Table 6

Descriptive Statistics for MHLS, Number of Years of Post-Secondary School, Degree-Type, and Number of Clinical MH Training Courses

	Range			
	Minimum	Maximum	*M*	*SD*
MHLS Score	106	160	134.20	10.832
Number of Years of Post-Secondary School	0	20	7.95	3.085
Degree-Type[a]	1	3	1.58	.861
Number of Clinical MH Courses	0	60	4.63	7.558

Note. [a] Denotes a categorical variable. $N = 238$

Evaluation of the statistical assumptions for RQ2. I checked the following standard assumptions for the multiple linear regression: linearity, homogeneity of regression, independence of errors, normal distribution of the residuals, homogeneity of variance, and multicollinearity using variance inflation factor (VIF) scores for the individual predictor variables. Regression analysis follows the general linear model (GLM) and requires that (a) all predictor variables have a linear relationship with the outcome variable and (b) the slopes of the regression lines between predictor variables remain roughly equal (i.e., homogeneity of regression) (Field, 2013). To test for these

assumptions, I modeled the outcome variable and found no significant interactions between regression lines. Via visual scan of the P-P residual plot, I also confirmed a linear relationship between predictor and outcome variables (Field, 2013).

In testing for independence of errors, error scores for regression analysis should have no relationship with preceding error scores. To test this assumption, I conducted the Durbin-Watson tests and expected a value of less than 2 (Field, 2013). The results of the Durbin-Watson test were .26, thereby verifying the assumption of independence of errors.

Regarding normality of the continuous variables, I used histograms of the residuals, finding normal distribution with values centered evenly around zero. Additionally, I tested the assumption of homogeneity of variance for regression analysis, which must show equal variances of residuals along the regression line for each of the predictor variables. To test for homogeneity of variance, I visually analyzed the P-P residual plot and a scatterplot, both of which met the required assumptions. The scatterplots also showed that the spread of the residuals clustered fairly evenly around zero (i.e., distance from regression line), thereby showing no obvious patterns in the data. As discussed previously, the number of clinical MH training courses was positively skewed, showing that the majority of respondents had taken fewer courses. Due to the typical theological coursework of the clergy population, this finding was not unexpected.

Finally, I checked for multicollinearity. According to statisticians, the bivariate correlations between pairs of predictor variables should be less than the absolute value of .8 (Laureate Education, Inc., 2009). Additionally, the VIF should have a conservative value around 1, and liberally, not higher than 10 (Field, 2013). I found all bivariate

correlations less than +/- .3 and the VIF scores ranged from 1.017-1.233, thereby showing the data met the assumption regarding multicollinearity.

Report of statistical analysis for RQ2. I first ran a standard multiple regression to explore whether the educational predictor variables (years of post-secondary school, degree-type, and number of clinical MH training courses), predicted higher scores of MHL, as measured by the MHLS (O'Conner & Casey, 2015). As shown in Table 7, the educational variables model (Model 1) significantly, positively predicted MHL scores, $F(3,237) = 3.051$, $p = .029$, $R = .038$, Adj. $R^2 = .025$). The data in Table 8 indicated that years of post-secondary school and degree-type did not significantly predict MHL scores, $\beta = -.021$, $p = .754$ and $\beta = -.084$, $p = .237$, respectively. The data also showed that the number of clinical MH training courses significantly, positively predicted MHL scores, $\beta = .178$, $p = .006$, 95% CI [.08, .45]. The educational variables model accounted for 2.5% (Adj. $R^2 = .025$) of the variance. Therefore, I rejected the null hypothesis (H0: $\beta1 = \beta2 = \beta3 = 0$) and accepted the alternative hypotheses (H1: At least one $\beta1 \neq 0$, $p \leq .05$). Because the non-significant findings may have obscured the amount of variance accounted for by the significant relationship between clinical MH training courses and MHL scores, I conducted stepwise multiple linear regression with the same data points. The results of the stepwise regression revealed a different model (Model 2), discussed next.

Table 7

Summary of Regression Models
For Number of Years Post-Secondary School, Number of Clinical MH Training Courses, and Degree-Type

Source	SS	*df*	MS	*F*	f^2	*p*
Model 1						
Regression	1046.84	3	348.947	3.051	.0256	.029*
Residual	27808.32	234	114.365			
Error	27808.309	237				
Model 2[a]						
Regression	877.53	1	877.53	7.690	.0277	.006**
Residual	26930.79	236	114.11			
Error	27808.32	237				

Note. [a]: Excludes Years of Post-Secondary School and Degree-Type, *p < .05, **p < .01

I conducted a stepwise regression, which automatically removed years of post-secondary school and degree-type to create the best-fitting model to explain the data points. As shown in Table 8, Model 2 revealed that the number of clinical MH training courses was a significant predictor of MHL scores, β = .178, p = .005, 95% CI [.07, .44]. That is, for every one-unit increase of the number of clinical MH training courses taken, MHL scores would increase by .18. Furthermore, the findings in Table 7 indicated that Model 2 significantly, positively predicted MHL scores, $F(1,237) = 7.690$, $p < .001$, R^2 = .032, Adj. R^2 = .027. Model 2 accounted for more variance than Model 1; therefore, I

confirmed the rejection of the null hypothesis (H0: $\beta 1 = \beta 2 = \beta 3 = 0$) and reconfirmed the alternative hypotheses (H1: At least one $\beta 1 \neq 0$, $p \leq .05$). Model 2 accounted for 2.7% (Adj. $R^{2} = .027$) of the variance with a small to medium effect size ($f^2 = .03$) (according to Cohen, 1988; 1992; Cohen, Cohen, West, & Aiken, 2002). Hence, 97.3% of MHL scores remained unexplained by this regression model.

Table 8

Summary of Model Coefficients
For Number of Years Post-Secondary School, Number of Clinical MH Training Courses, and Degree-Type

Source	B	*SE*	*β*	*p*
Model 1				
Years of Post-Secondary School	-.074	.237	-.021	.754
Number of Clinical MH Courses	.255	.092	.178	.006**
Degree-Type	-1.06	.889	-.084	.237
Model 2[a]				
Number of Clinical MH Courses	.264	.093	.184**	.005**

Note: [a] Excludes Years of Post-Secondary School and Degree-Type
VIF scores ranged from 1.000-1.216. Overall Model 1 $F(3,237) = 3.051$, $p = .029$, $R^2 = .038$, Adj. $R^2 = .025$. and Model 2 $F(1,237) = 7.690$, $p = .006$, $R^2 = .032$, Adj. $R^2 = .027$.
**$p < .01$.

Research Question 3

I asked the following for research question 3 (RQ3): to what extent, if at all, do demographic variables (age [in whole numbers], gender identity (*male, female, other*], geographical location [*rural/urban*]) predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the US? I presented the following null hypothesis: Demographic variables, (age [in whole numbers], gender identity (*male, female, other*], geographical location [*rural/urban*]), do not predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the US. I presented the following alternative hypothesis: at least one of the predictor variables, (age [in whole numbers], gender identity (*male, female, other*] and geographical location (*rural/urban*), predict significantly higher scores of mental health literacy, as measured by the MHLS (2015), for Christian clergy in the US.

Descriptive statistics for RQ3. Of the three demographic variables in RQ3, one was continuous and two were categorical. Regarding the continuous, numerical predictor variable of age, most clergy respondents (83.6%) were between the ages of 35 and 64 with the majority of participants (n = 83) reporting ages between 55-64, followed by 66 participants reporting ages between 45-54, and 50 participants reporting ages between 35-44 (M = 50.7, SD = 11.61). The two categorical predictor variables include gender identity and geographical location. Of the 238 participants, 69.1% were male (n = 162) and 31.9% were female (n = 76). Regarding geographical location, 31.1% of clergy participants lived in rural areas (n = 74) and 68.9% lived in urban areas (n = 164).

With this initial data, I ensured there was no missing data and that I had the appropriate sample size, recommended to be at least 107 (Laureate Education, Inc., 2009). This study had 238 participants and no missing data, thereby meeting these initial assumptions. I also checked for outliers and ensured that no scores were +/- 3.29 standard deviations from the mean (Field, 2014; Laureate Education, Inc., 2009). In Table 9, I present the descriptive statistics for the predictor and outcome variables for RQ3. Then I review the assumptions for this multiple linear regression.

Table 9

Descriptive Statistics for Age, Gender Identity, and Geographical Location

	Range			
	Minimum	Maximum	*M*	*SD*
MHLS Score	106	160	134.20	10.83
Age	25	86	50.68	11.61
Gender Identity[a]	1	3	1.32	.467
Location[a]	1	2	1.69	.463

Note. [a] Denotes a categorical variable. N = 238

Evaluation of the statistical assumptions for RQ3. For the second multiple linear regression, I again checked the following standard assumptions: linearity, homogeneity of regression, independence of errors, normal distribution of the residuals, homogeneity of variance, and multicollinearity using VIF scores for the individual predictor variables. To test for linearity and homogeneity of regression, I modeled the outcome variable and found no significant interactions between regression lines and a linear relationship between predictor and outcome variables, as shown by the P-P residual

plot. In testing for independence of errors, I conducted the Durbin-Watson test and compared it to the recommended critical value of less than two (Field, 2013). The results of the Durbin-Watson test were .267, thereby verifying the assumption of independence of errors.

Regarding normality of the continuous predictor variable, I used a histogram of the residuals and found a normal distribution around zero. Additionally, I tested the assumption of homogeneity of variance to ensure the error variance was uniform across the model (Field, 2013). To test for homogeneity of variance, both the P-P residual plot and a scatterplot showed that the data met the required assumptions. For the continuous variable in RQ3, skewness and kurtosis measures were below one standard deviation, thereby showing no positive or negative patterns in the data. Finally, I checked for multicollinearity. I found all bivariate correlations less than +/- .8 with the VIF scores ranging from 1.005 to 1.028 (i.e. conservatively near 1; Field, 2013), thereby showing the data met the assumption regarding multicollinearity.

Report of statistical analysis for RQ3. I conducted a standard multiple linear regression to explore whether the demographic predictor variables (age, gender identity, geographical location) predicted higher scores of MHL, as measured by the MHLS (O'Conner & Casey, 2015). As shown in Table 10, the demographic variables Model (Model 3) significantly predicted MHL scores, $F(3,237) = 2.959$, $p = .033$, R = .037, Adj. $R^2 = .024$. The data in Table 11 indicated that age and geographical location did not significantly predict MHL scores, $\beta = -.082$, $p = .211$ and $\beta = -.031$, $p = .629$. The data did indicate that gender significantly predicted MHL scores, $\beta = -.160$, $p = .015$, 95% CI

[1.05-6.90]. To ensure the best-fitting model, I conducted a stepwise multiple linear regression with the same data points.

Table 10

Summary of Regression Models
For Age, Gender Identity, and Geographical Location

Source	SS	*df*	MS	*F*	f^2	*p*
Model 3						
Regression	1016.47	3	338.82	2.959	.025	.033*
Residual	26791.85	234	114.50			
Error	27808.39	237				
Model 4[a]						
Regression	817.71	1	817.71	7.150	.026	.008**
Residual	26930.79	236	114.11			
Error	27808.32	237				

[a]: Excludes Age and Geographical Location. *$p < .05$, **$p < .01$

Resulting from the stepwise regression, Model 4 removed age and geographical location to create a better fitting model. As shown in Table 11, Model 4 revealed female gender alone was a significant predictor of MHL scores, $\beta = .171$, $p = .008$. The findings in Table 10 indicated that female gender significantly, positively predicted MHL scores, $F(1,237) = 7.150$, $p < .008$, $R^2 = .029$, Adj. $R^2 = .025$. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis (H1: At least one $\beta 1 \neq 0$, $p \leq .05$). Model 4 only accounted for 2.5% (Adj. $R^{2 =} .025$) of the variance with a small to medium effect size ($f^2 = .03$) (Cohen, 1988; 1992). Hence, 97.5% of MHL scores remained unexplained by this regression model.

Table 11

Summary of Model Coefficients

For Age, Gender Identity, and Geographical Location

	B	*SE*	*β*	*p*
Model 3				
Age	-.076	.061	-.082	.211
Gender Identity	3.701	1.505	.160	.015*
Location	-.726	1.502	-.031	.629
Model 4[a]				
Gender Identity[a]	3.976	1.487	.171	.008**

Note: [a] Excludes Age and Geographical Location. VIF scores ranged from 1.00-1.023. Overall Model 3 F(3,237) = R = .037, Adj. R^2 = .024 and Model 4 $F(1,237) = 7.150$, $p < .001$, $R^2 = .029$, Adj. $R^2 = .025$. *$p < .05$, **$p < .01$.

Exploratory analyses. To ensure I had found the best-fitting model for all the variables, I entered the six predictor variables for stepwise analysis on the outcome variable. After checking the assumptions, I conducted stepwise multiple linear regression analysis and found that the best-fitting model included only female gender and number of clinical MH training courses as significant predictors of MHL scores, $F(1,235) = 7.290$, $p = .001$, as shown in Table 12. Models 5 and 6 excluded the other four predictor variables, which included number of years of post-secondary school, degree-type, age, and geographical location. As shown in Table 13, Model 5 revealed that the number of clinical MH training courses was a significant predictor of MHL scores, $\beta = .178$, $p = .006$. Model 6 revealed that the number of clinical MH training courses and female

gender together also were significant predictors of MHL scores, β = .171, p = .008 and β = .164, p = .010, respectively.

Moreover, the findings in Table 12 indicated that Model 6, which included number of clinical MH training courses and female gender, significantly, positively predicted MHL scores, $F(2,237) = 7.299$, p = .001, R^2 = .058, Adj. R^2 = .050 and was a better-fitting model than number of clinical MH training courses alone, $F(1,237) = 7.690$, p = .006, R^2 = .032, Adj.R^2 = .027. Model 6 accounted for 5.0% (Adj. R^2 = .050) of the variance with a small to medium effect size (f^2 = .06) (Cohen, 1988; 1992; Cohen et al., 2002). Hence, 95.0% of MHL scores remained unexplained by this regression model.

Table 12

Summary of Regression Models

For Number of Clinical MH Training Courses and Gender Identity

Model		SS	*df*	MSE	*F*	f^2	*p*
5[a]	Regression	877.526	1	877.526	7.690	.03	.006[a]
	Residual	26930.793	236	114.114			
	Total	27808.319	237				
6[b]	Regression	1626.449	2	813.224	7.299	.06	.001[b]
	Residual	26181.870	235	111.412			
	Total	27808.319	237				

Note. [a]. Predictors: Number of Clinical MH training Courses
[b]. Predictors: Number of Clinical MH training Courses and Gender Identity

Table 13

Summary of Model Coefficients

Number of Clinical MH Training Courses and Gender Identity

	B	SE	β	*p*
Model 5[a]				
Number of Clinical MH Courses	.255	.092	.178	.006**
Model 6[b]				
Number of Clinical MH Courses	.245	.091	.171	.008**
Gender Identity	3.808	1.469	.164	.010*

Note: [a] Excludes Number of Years of Post-Secondary School, Degree-Type, Age, Gender, and Geographical Location. [b] Excludes Number of Years of Post-Secondary School, Degree-Type, Age, and Geographical Location. VIF scores ranged from 1.000-1.002. Overall Model 5 $F(1,237) = 7.69$, $p = .006$, $R^2 = .032$, Adj.$R^2 = .027$ and Model 6 $F(2,237) = 7.29$, $p = .001$., $R^2 = .058$, Adj. $R^2 = .050$. *$p < .05$, **$p < .01$.

Summary

The result of the ANOVA for RQ1 was not significant; therefore, I accepted the null hypothesis that there are no significant differences between the MHL scores of Christian clergy from different denominational affiliations in the US. The results of both the standard and stepwise multiple regression for RQ2 were significant; therefore, I rejected the null hypothesis and accepted the alternative hypothesis that educational variables significantly predicted MHL scores of Christian clergy in the US. More specifically, the number of clinical MH training courses significantly predicted MHL scores while number of years of post-secondary school and degree-type were not

significant predictors of MHL scores. The results of both standard and stepwise multiple regression for RQ3 were significant; therefore, I rejected the null hypothesis and accepted the alternative hypothesis that demographic variables significantly predicted MHL scores of Christian clergy in the US. More specifically, female gender was a significant predictor of MHL scores while age and geographical location were not significant predictors of MHL scores. Overall, the best-fitting model to describe differences in MHL scores included both number of clinical MH training courses and female gender.

In chapter 5, I summarize these results and present conclusions from the analyses. I first interpret the findings with discussion regarding the limitations of the study. Then, I present recommendations for further research and describe the potential social, methodological, and practical implications of the study. Finally, I provide a conclusive summary intended to capture the key essence and potential relevance of this study.

Chapter 5

In this chapter, I discuss the results of my dissertation study and the potential impact of these results for filling the current gap in research regarding clergy members' MHL rates. I also present the potential relevance of these findings in theoretical, methodological, practical, and social justice purposes. In the Chapter 2 Literature Review, I described having identified only three studies from the previous 15 years that measured the MHL of Christian clergy (Chevalier et al., 2015; Stansbury et al., 2010; Pillion et al., 2012). These three studies together surveyed less than 200 total clergy members from the US, leaving a gap in knowledge regarding Christian clergy and their effectiveness as de facto service providers and conduits to the formal mental health care system. This gap in understanding may prove problematic for the millions of US citizens who rely on clergy for mental health care services and may not receive adequate treatment (Lopez et al., 2012; Snowden, 2012; Standford & Philpott, 2011; Sue et al., 2012; Sullivan et al., 2013; Payne, 2013).

I conducted this research in order to examine predisposing demographic and educational characteristics of a large cross-section of US Christian clergy and measure their MHL scores in relation to several predictor variables. Two primary purposes guided the direction of the study. The primary research purpose was to illuminate current understanding of clergy's MHL, as measured by the MHLS (O'Conner & Casey, 2015), so as to extend the current knowledge base regarding clergy members' capacities to (a) provide sound mental health care services and (b) promote effective help-seeking behaviors in their communities. The second, related purpose involved the ongoing need

to understand and assess the variables that may impact clergy members' MHL rates, so that counselors and counselor educators may increase and improve interprofessional training, collaboration, and referral efforts with clergy.

Introduction and Overview

Overall, clergy participants from this study showed above average MHL, as compared to community sample benchmarks provided by the pilot studies of the MHLS (O'Conner & Casey, 2015). The results of this study answered three specific research questions. In regard to RQ1 and comparing the MHL scores of Christian clergy from different denominational affiliations in the US, I found that no significant differences emerged from the data. In addressing RQ2 and RQ3, the results of the two multiple linear regressions revealed non-significant results for number of years of post-secondary education, degree-type, age, and geographical location as predictors of MHL scores. Two predictor variables did show significant relationships with the outcome variable. The number of clinical MH training courses taken by a participant and female gender identity predicted higher scores on the MHLS (O'Conner & Casey, 2015). Some of the findings of this study fit with previous research efforts and the theoretical underpinnings of the MHL and the behavioral models of health literacy; however, some of the non-significant results challenged the current knowledge base and provided opportunities for additional research and investigations.

Denominational Affiliation

Due to identifying minimal prior research on clergy's MHL, I could not present a directional hypothesis for RQ1. I had found only three research studies published in the

last 15 years that directly measured (i.e., via numerical data) the MHL rates of Christian clergy in the US; furthermore, I had identified even fewer articles that addressed denominational affiliation with regard to MHL. Still, researchers have consistently called for investigation and exploration of the impact of denominational affiliation on the MHL of clergy providers (Farrell & Goebert, 2008; Hedman, 2014; Moran et al., 2005; Noort et al., 2011; Pickard, 2012; Sullivan et al., 2013). Therefore, I conducted this study partly to answer that call for research and, subsequently, surveyed a diverse, national, sample of Christian clergy in the US.

Some insights regarding denominational affiliation provided the context for the results of RQ1. Moran et al. (2005) investigated the four major denominational affiliations and their pastoral practices. These researchers only noted the amount of continuing education regarding pastoral care and not MHL rates. Their findings indicated that 66% of Mainline Protestant and 40% of Catholic clergy took MH training courses, which was a higher percentage than their Evangelical and non-specific Protestant counterparts (33%). These findings suggested to researchers that Mainline Protestant clergy, then Catholic, and followed by Evangelical Protestants, may demonstrate increasing knowledge of MH issues. In RQ 2, I did find that higher numbers of clinical MH training courses predicted higher MHL scores. However, even though I found the highest mean scores of MHL in the Mainline Protestant group, this score was not significantly higher than the mean scores for their Catholic or Evangelical counterparts. Therefore, I could not relate the results from my research with those from this previous study.

Payne (2013) surveyed a group of Protestant pastors in California on their beliefs about the etiology of depression. The results of this study provided some insights into some differences within the Protestant movement. In comparing Pentecostal and Mainline Protestant clergy, Payne showed that Pentecostal (i.e., more broadly, Evangelical Protestant) clergy were more likely to disagree ($RR = .13$, $p = .025$) with a medical cause of depression while Mainline Protestant clergy were more likely to disagree ($RR = 13.5$, $p = .004$) with a spiritual etiology of depression. Compared to the Evangelical Protestant group, the Mainline Protestant group recognized the complex nature of depression and, thereby, showed enhanced clinical understanding of depression (Payne, 2013). In contrast to these findings, the results of my study showed no significant difference in the mean MHL scores between Mainline and Evangelical Protestant clergy. However, I must note that the MHLS (O'Conner & Casey, 2015) measures the total construct of MHL and not only perceptions of etiology. Therefore, the contrast may be the result of the more comprehensive nature and scoring rubric of the MHLS.

Hedman (2014) reported limited insights into denominational affiliation as it related to pastoral counseling activities and self-efficacy beliefs for working with depression. Findings from this previous study revealed that Catholic clergy counseled significantly more of their parishioners compared to some Mainline and Evangelical Protestant groups. However, denominational affiliation did not predict significantly different perceptions of self-efficacy for counseling for depression or recognizing symptoms of depression. The findings from my study fit with the non-significant results

of Hedman (2014), who also called for additional research regarding denominational specification and pastoral counseling activities.

Of the three identified studies specifically addressing MHL rates of clergy, only two provided insights into denominational influences. Chevalier et al. (2015) investigated the ability of a clergy sample of 61 participants in Massachusetts to meet the needs of returning service members. Researchers found that the majority of the clergy sample detected depression (83.6%) and suicidal symptoms (50.8%), but less than half identified problematic drinking, low energy, and difficulties with flashbacks, nightmares, sleeping, and irritability (Chevalier et al., 2015). Their investigation inquired as to clergy members' denominational affiliation, but did not use this information for statistical or comparative purposes. The overall findings indicated a need for continuing mental health trainings for clergy of all denominational affiliations who provide counsel to veterans.

Researchers from the other two studies I identified as specifically addressing MHL did address denominational affiliation but not comparatively among denominational groups. Pillion et al. (2012) investigated the MHL of 48 Catholic priests in North Carolina using a vignette-based survey and found significant results. Of the Catholic participants, between 87-92% referred the various hypothetical clients to the formal mental health care system for services. The majority (85%) of these Catholic clergy also believed in the importance of the referred MHP holding spiritual perspectives in line with Catholic traditions. In fitting with Pillion et al.'s finding, I found that Catholic clergy scored better than average on the MHLS (M = 134.49, SD = 9.35),

collectively scoring approximately seven points higher than the benchmark community sample (*M difference* = 6.91, *CI* = .24-.91, *d* = .5) (O'Conner & Casey, 2015).

Similarly, Stansbury et al. (2010) qualitatively explored the MHL of one denominational group in a particular geographical location. Results showed that eight out of nine African American Baptist (i.e., Evangelical Protestant) pastors in rural Kentucky accurately identified Alzheimer's Disorder (AD) in vignette case studies. Researchers qualitatively investigated additional MHL factors, including effective treatment and provider-type, which showed that experienced pastors understood effective forms of treatment provision while inexperienced pastors preferred spiritually-based interventions only. In partially fitting with Stansbury et al.'s (2010) conclusions, I found that the Evangelical Protestant group showed MHL skills on the MHLS (*M* = 132.73, *SD* = 11.63), scoring an average of more than five points higher than the benchmark community sample (*M difference* = 5.35, 95% CI = .22-.64, *d* = .43) (O'Conner & Casey, 2015). I did not analyze number of years of experience as a predictor variable, so I could not make more direct comparisons with Stansbury et al.'s (2010) conclusions regarding the advantage of experienced pastors in providing mental health services. However, I did examine age without significant results, which might offer some insights about experience as a potential predictor of MHL, as will be discussed in the next section.

In concluding this section on the impact of denominational affiliation on clergy members' MHL, I highlight how this study was the first of its kind to use a parametric instrument to measure the MHL rates of a denominationally-diverse and national sample of Christian clergy in the US. Therefore, I also conducted a general and explorative

comparison between the MHL scores of clergy participants in my study and of the community sample and the MHP sample used by O'Conner and Casey (2015) in their pilot studies of the MHLS. As promoted by Funder et al. (2013), cross-study comparisons hold value for exploratory research when comparing groups with large sample sizes and utilizing confidence intervals, as I did in the results section. The exploratory comparisons provided an initial assessment of the general MHL status of Christian clergy in the US among the four major Christian denominational classifications.

In regard to denominational affiliation and MHL rates of Christian clergy, two findings from this investigation extend the knowledge-base of the discipline. First, no significant differences between MHL rates of clergy from different denominational affiliations emerged in the analysis, thereby providing insight on the equivalent need for future MHL campaigns and interventions across all denominational groups. Second, this sample of 238 clergy members from across the US demonstrated significantly higher MHL rates, when compared to the community sample, and significantly lower MHL rates, when compared to the professional group of MHPs in O'Conner and Casey's (2015) pilot study.

Considering clergy members' roles as informal mental health care providers and conduits to the formal mental health care system, their higher rates of MHL, as compared to the community sample, are encouraging. However, since clergy often assume the role of the de facto and front-line counseling providers, researchers contend that their MHL should approach that of formal MHPs (Ali & Milstein, 2012; Milstein et al., 2010; Sullivan et al., 2013; Weaver et al., 2003;). In fact, clergy must be able recognize when

normal pastoral issues, such as grief or anxiety, move from subclinical concerns to those requiring professional intervention (Ross & Standford, 2011). Hence, interventions to increase the MHL of all denominations of Christian clergy remain warranted.

Educational Variables

In this study, the full educational variables model accounted for 2.5% of the variation in MHL scores, which was a small effect size (f^2 = .03), according to Cohen (1988; 1992). Of all the educational variables, both the number of years of post-secondary school and degree-type were not significant predictors of MHL. In comparison to previous studies, these non-significant outcomes were somewhat surprising. Researchers have found that educational level and degree-type enhanced clergy perceptions of their abilities to (a) recognize mental illness (Payne, 2013), (b) increase self-efficacy beliefs about providing pastoral counseling (Hedman, 2014), experience reduced stress when assuming informal counseling roles (Bledsoe et al., 2013), and (c) work collaboratively with MHPs (Thomas, 2012). Neither of the predictor variables (i.e., number of years of post-secondary school and degree-type) significantly impacted the MHL scores of clergy in the current study, thereby challenging these prior findings.

Several reasons may explain the discrepant outcomes between studies. First, I used a parametric instrument to measure MHL, rather than perceptions of individuated aspects of the MHL construct, as other researchers investigated (Bledsoe et al., 2013; Hedman, 2014; Payne, 2013; Thomas, 2012). Therefore, when compared to the results of these previous studies, I measured related, but conceptually different, outcome variables,

making direct comparisons statistically impossible. Secondly, the sample in my study was highly educated with 83% holding advanced (i.e. master's or doctoral) degrees. Therefore, their collectively high number of post-secondary years of education may have attenuated the significance of the results. Additionally, the respondents in this study may have self-selected to complete the survey due to academic interest in the subject-matter, thereby influencing the findings, as has been found in web-based, opt-in samples (Baker et al., 2010; Yeager et al., 2011). In consideration of these potential explanations, additional exploration into educational attainment and MHL may be warranted.

In specifically addressing the variable, degree-type, further discussion becomes important. The results of this study revealed that degree-type did not significantly predict MHL scores of the clergy sample, which challenged the results of other previous studies (Chevalier et al., 2015; Milstein et al., 2008; Noort et al., 2012). I posit that the design of the current study may clarify the discrepancy. In the literature review, I found that a majority of polled clergy nominated continuing education in MH training as important to their work with parishioners with SMI (Hedman, 2014; Payne, 2013; Standford & Philpott, 2011). Therefore, in addition to degree-type, I included number of clinical MH training courses as a separate, educational variable in RQ2. By offering both degree-type and number of clinical MH training courses as potential predictor variables, I was able to investigate whether one, both, or neither of them predicted MHL scores.

As a result of the stepwise regression, I found that only the number of clinical MH training courses predicted MHL. By including both variables (i.e., degree type and number of clinical MH training courses) for investigation, my study differed from the

designs of those previous researchers (Chevalier et al., 2015; Milstein et al., 2008; Noort et al., 2012) and may partially explain the difference in results. To that end, my findings concurred with these previous researchers that educational variables do predict MHL scores, but extended the current knowledge-base regarding degree-type, as I discuss next.

After conducting stepwise multiple regression, I found that the best-fitting model automatically excluded degree-type and included only the number of clinical MH training courses variable. This second model accounted for 2.7% of the variation in clergy MHL scores, thereby showing that the best-model for predicting MHL removed degree-type and only included number of clinical MH training courses. This significant finding, though small, suggests that clergy may not need advanced degrees in mental health to help their parishioners. It seems that clergy can increase their MHL by taking continuing education classes and post-graduate coursework.

This finding confirmed findings from previous research showing that MHL campaigns and post-graduate educational programs improved MHL, with other studies demonstrating that continuing education both increased knowledge (Sharp et al., 2006; Reavley & Jorm, 2012) and reduced negative stigma (Jorm & Kitchener, 2011; Wright et al., 2012). In a recent study, Hedman (2014) also found that continuing education in mental health increased clergy participants' self-efficacy about providing pastoral counseling services. Furthermore, even brief mental health first-aid training courses have increased clergy members' abilities to understand mental illness and assist survivors of trauma (Aten et al., 2013). Hence, the findings in this study confirmed previous research about the importance of continuing clerical education in mental health issues and

underscored the importance of interprofessional trainings and collaborations between clergy and MHPs.

Demographic Variables

As characteristic of the behavioral models of health literacy (Andersen, 1968; 1995; Pescosolido, 2013), the predisposing predictor variables in this study included age, gender identity, and geographical location. Using this theoretical framework to guide studies, previous researchers consistently found that recognition of a health problem, older age, female gender, Western orientation, and urbanity predicted higher rates of health literacy (Andersen & Newman, 2005; Mojtabai et al., 2011; Pescosolido, 2013). In contrast to some of the previous findings from the behavioral models, I found that age and geographical location did not predict higher scores of MHL.

Age

The results of the current study seem to challenge epidemiological research showing that older age predicted higher levels of health literacy (Andersen & Newman, 2005; Pescosolido et al., 2013). Since symptom severity predicted problem-recognition and treatment-seeking behaviors for physical illnesses, older participants reflected higher levels of health literacy due to their advanced and obvious physical symptoms (Pescosolido, 2013). Regarding the age variable in this study, I proposed age as a predictor of MHL, not physical health literacy, and the results revealed an insignificant relationship. In contrast to symptoms of physical illness, symptoms of mental illness can be equally prevalent in young and old populations, potentially neutralizing age as a predictive factor of MHL (Reavley & Jorm, 2011; Wright et al., 2012). Hence, the

burden of mental illness, shared equally among the young and old, may prompt equivocal levels of MHL, as I found in this current study.

Furthermore, recent research based on the behavioral model showed fewer significant results when relating demographic variables, such as age and geographical location, to stigma responses (Pescosolido, 2013). Stigma is an underlying factor of the MHL concept and more prevalent in mental health issues than physical health issues (Jorm, 2012; Link & Phelan, 2013; O'Conner & Casey, 2015). The underlying influence of stigma may have mediated the results of my study. More specifically, if younger participants showed low levels of stigma, as revealed by previous investigations (Wright et al., 2012), their MHL scores would be higher. As a result, the overall scores on the MHLS would be higher, even if their knowledge-levels waned behind those of their older counterparts, as has been found in the behavioral model research (Pescosolido, 2013). Therefore, understanding the relationship between age and MHL may require additional study on the experience of stigma, as mediated by age and other factors. Since understanding the relationship between stigma and MHL remains nuanced and contested, further research regarding demographic variables, stigma, and MHL is warranted (Link & Phelan, 2013; Pescosolido, 2013).

In review, the nonsignificant age-based findings in this study may reflect the complex construct of MHL, which not only includes knowledge about mental illness and effective treatment type, but also attitudes, beliefs, and stigma about mental illness (Jorm et al., 2012). This conclusion fits the results of previous MHL researchers, who have not found strong predictive patterns between age and MHL as have the behavioral model

researchers (Pickard, 2012; Yap & Jorm, 2012). Specifically, Yap and Jorm (2012) found that younger participants recognized certain disorders significantly more often than older participants but still required more nuanced understanding of the underlying symptoms of the disorders. In some contrast, Olsson and Kennedy (2010) showed that young participants had poor MHL skills, even though Wright et al. (2012) found they had lower levels of stigma than older participants. Further adding to the inconsistencies in age-related findings, Pickard (2012) showed that age did not relate to clergy participants' beliefs about their counseling competencies, not finding age to be an influencing factor in clergy's MHL. In consideration of the results of my study and lack of consistent patterns in previous MHL research, I posit that MHL gaps may not follow generational patterns, as behavioral researchers demonstrated in the health literacy research. Furthermore, the age variable may highlight different expressions of stigma as underlying factors of the behavioral models and MHL framework.

Geographical Location

Regarding geographical location, researchers found that rural populations consistently demonstrated less ability to recognize mental illness and seek treatment when compared to their urban counterparts (Jones et al., 2012; Kirchner et al., 2011). Although health literacy researchers often link this finding to educational variables (Andersen & Newman, 2005), other researchers ascribe rural populations' poor MHL to lack of access and resources, cultural variables, and stigmatized beliefs (Mojtabai et al., 2011; Unutzer et al., 2011; Snowden, 2012). The results of my study revealed that geographical location was not a significant predictor of MHL scores for clergy

participants. Based on the results of my study, it seems that rural clergy participants may not have experienced the same barriers to education, access, or resources reflective of typical rural populations.

Some explanations for this discrepancy seems plausible. Clergy in this study, both urban and rural, demonstrated high levels of advanced education and years of professional experience with parishioners. Therefore, some of the rural clergy participants in the current study may have spent significant years in urban locations while pursuing their education and seminary internships. Additionally, I posit that several factors, such as length of time living in a location and stigma, may impact the definition of geographical location and require more nuanced investigation in the future (Pescosolido, 2013). Moreover, recent research demonstrated that culture and community may mediate the impact of stigma on MHL in various inter-country locations (Pescosolido, 2013). To that end, clergy maintain their own professional culture and community, as well as standards of outward beliefs and behaviors toward their flock under their care (Payne, 2014; Stansbury et al., 2011; Stansbury et al., 2012). As a result of culturally-mediated expressions of stigma, rural clergy's beliefs about mental illness may differ from their rural community counterparts. Still, given the results of this study, it seems that MHL interventions for clergy may be equally important across rural and urban locations.

Gender Identity

When investigating the three demographic variables, I found that only gender identity predicted MHL scores and accounted for 2.5% of the variation in MHL, which is

a small effect size (according to Cohen, 1988; 1992; Cohen et al., 2002). This finding confirmed previous behavioral model research showing that women in Western cultures tend to recognize symptoms, seek treatment, and hold non-stigmatized views of mental illness more often than their male counterparts (Andersen & Newman, 2005; Pescosolido et al., 2013). The results of this study also confirmed MHL research showing that female participants demonstrated more adequate MHL than their male counterparts (Pickard, 2012; Yap et al., 2012). Additionally, they presented with mood disorders and sought clergy assistance more often than men for their MH concerns, making MHL of clergy vital for supporting female parishioners (Atkins et al., 2015; Eaton et al., 2012; Sai & Furman, 2013; Standford, 2007). In conclusion, female gender identity was the only predisposing, demographic variable from my study that significantly predicted higher rates of MHL scores.

Interpretation of Findings in the Context of Theoretical Framework

The best-fitting model to explain variations in MHL scores of Christian clergy in the US included both number of clinical MH training courses and female gender identity. Together, these two variables accounted for 5% of the model and a small to medium effect size ($f^2 = .06$) (Cohen, 1988; 1992; Cohen et al., 2002). In the next section, I interpret the findings of this study in the context of the behavioral and MHL models.

The Behavioral Models

The results of this study confirmed some of the tenets of the behavioral models of health literacy (Andersen, 1968; 1995). In the revised behavioral model, "primary determinants" of health literacy include age, gender identity, geographical location,

socioeconomic status (SES), cultural factors, and beliefs about health and health care services (Andersen, 1995, p. 7). The results from this study supported the idea that female gender and acquisition of health education positively impact health literacy. However, age, geographical location, degree-type, and level of general education did not significantly influence the MHL of the clergy sample, thereby disconfirming some of the tenets of the behavioral model for clergy populations. Although not directly proposed by the behavioral model framework, level and years of education and geographical location often reflect socioeconomic (SES) statuses (Andersen & Newman, 2005). Therefore, the non-significant results of years of schooling and geographical location as predictors of MHL in my study reveal that clergy's MHL may supercede the SES variable. As a result of the nonsignificant findings of years of secondary schooling, degree type, age, and geographical location, this study may challenge and extend the behavioral model in two ways.

First, clergy beliefs and experiences may not fit neatly into the tenets of the behavioral model. For example, previous MHL studies showed that knowing people with mental illness related to higher perceptions of MHL, particularly with regard to stigma (Jorm, 2012; Olafsdottir & Pescosolido, 2011). Therefore, clergy populations who have extended job-related experience with individuals with mental health issues may display higher levels of MHL, regardless of age, geographical location, and educational achievement. Additionally, the advanced degree-attainment by most of the clergy in this sample suggested that many participants had spent time in various locations for schooling and potentially gained some knowledge and insights about mental illness. Previous

researchers showed that learning about mental illness and symptoms of mental disorders increased perceptions of MHL in the general population (Jorm, 2012; Pescosolido, 2013) and in some clergy groups (Thomas, 2012). Therefore, it is foreseeable that the MHL rates of the clergy sample in my study reflected their progressive educational and professional experiences, making their MHL scores higher than those from the general population.

Secondly, results of the current study may extend the behavioral model theory to provide insight into the importance of continuing education toward health literacy and MHL. In addressing educational and professional achievements as standards of SES, the behavioral model positions SES as a somewhat static variable (Andersen, 1995; Andersen & Newman, 2005). Indeed, individuals without access to effective educational systems have been shown to lack the health literacy of their more highly-educated counterparts (Andersen & Newman, 2005; Mojtabai et al., 2011; Reavley, McCann, & Jorm, 2012). An important result of this study was the finding that clinical MH training courses significantly predicted higher MHL scores, regardless of the degree-type or the number of years of post-secondary schooling. These results showed that participation in individual MH training courses could improve MHL whether or not individuals previously had experience with or access to higher education. As a result, MHL campaigns could potentially increase MHL and improve health outcomes in areas where poorer SES and concomitant levels of schooling remain significant barriers to receiving effective treatment (Mojtabai et al., 2011).

Additionally, the MHL rates of clergy participants in my study were stable across denominational affiliations, indicating that individual coursework may improve MHL, regardless of the influence of denominational beliefs. Since denominational beliefs shape cultural beliefs and social behaviors (Brunn, 2015; Carroll, 2002), this study may point to educational interventions as potential ways to increase health literacy, even across some social and cultural barriers. Of course, this proposition requires extensive research not carried out in this study; however, additional research regarding continuing education as a means to increasing health literacy and MHL among diverse populations seems warranted. As confirmed by previous researchers, examining the complex relationships between cultural beliefs and health literacy remains the vital next-step for refining the behavioral model theory of health care (Olafsdottir & Pescosolido, 2011; Pescosolido, 2013).

In summary, the behavioral model provided the theoretical framework by which I investigated whether various demographic and educational variables impacted clergy members' MHL scores. Although the magnitudes of the effects were fairly small, the significant results of number of clinical MH training courses and gender identity variables on MHL rates confirmed the inclusion of both gender and educational factors in the behavioral model. Furthermore, the results informed potential interventions for future MHL campaigns among diverse populations.

The lack of significant findings for the age, geographical location, and years of education variables may challenge some of the tenets of the behavioral model, at least with regard to clergy populations. The nonsignificant results suggested that

comprehensive understanding of clergy's MHL rates may require additional or different models to account for a larger percentage of variations in MHL scores. Furthermore, the inability of the behavioral model variables to account robustly for clergy members' MHL scores suggested that further research on the inclusion cultural factors may improve the overall usefulness of the behavioral model for predicting and explaining the complex nature of the MHL construct, as I discuss next.

Mental Health Literacy as a Theoretical Construct

I structured this study upon the conceptual frameworks of MHL research. Jorm (2012) defined MHL as the ability to (a) recognize mental illness (b) find accurate information about mental illness, (c) identify mental health risks, (d) pursue appropriate help-seeking behaviors, (e) identify effective treatment providers, and (f) offset the negative stigma typically associated with mental illness. Researchers found that high MHL coincided with effective, timely help-seeking behaviors and concomitant reduction of negative health outcomes (Jones et al., 2012; Lauber et al., 2005; Reavley & Jorm, 2011a; Wright et al., 2012). Therefore, these MHL researchers also posited that increasing MHL in the public would increase positive help-seeking behaviors by those with SMI. Additionally, Sharp et al. (2006) discussed how higher rates of MHL encouraged "mental health promotion," or the referral behaviors assumed by concerned others to assist those displaying symptoms of mental illness (p. 422). Since then, social justice researchers have insisted that increasing the MHL of community leaders, including teachers and clergy, may reduce the significant mental health care disparities

currently impacting minority populations (Alegria et al., 2014; Lopez et al., 2012; Snowden, 2012; Sue et al., 2012).

The theoretical proposition that high MHL both (a) increases promotions to appropriate providers and (b) produces improved mental health outcomes was the underlying social change motivation for my study. As promoters of MHL and mental health care, clergy could be key allies in the current struggle against mental health care disparities. Given that clergy referrals to MHPs have been rare, as low as 10%, it is reasonable to question the MHL rates of clergy (Aten et al., 2010; Farrer & Goebert, 2008; Standford & Philpott, 2011). For clergy to refer their parishioners to formal MHPs, they must be able to recognize mental illness and identify appropriate providers. As summarized by Jorm (2012), 20 years of previous research showed that MHL is the precursor to positive help-seeking behaviors and mental health promotions. If clergy do not refer their parishioners to MHPs, it is foreseeable that their MHL may not be sufficient. Due to the dearth of MHL research with Christian clergy participants, I undertook to measure the MHL of a large cross-section of Christian clergy across the US.

Results of the MHLS (O'Conner & Casey, 2015) revealed that the national sample of clergy demonstrated MHL skills. Other than the previously reviewed pilot studies, my dissertation study is the first to use the MHLS (O'Conner & Casey, 2015) to measure MHL scores. Therefore, reliably labeling the status of clergy MHL rates as *moderate* or *average* is not scientifically possible at this time. In comparison with the benchmark results of the instrument creators (O'Conner & Casey, 2015), this clergy sample demonstrated MHL scores that were higher than a community benchmark sample,

but not commensurate with the scores of formal MHPs. Therefore, I can surmise that the results showed clergy's MHL as being better than the general population, but lower than formal providers. With this finding, I posit that clergy demonstrate MHL and require additional trainings to improve their functioning as de facto providers and conduits to the formal mental health care system. This general assessment confirms the conclusions of the three studies addressing clergy's MHL that I had previously identified. I now discuss how my results fit with the results of these previous studies (Chevalier et al., 2015; Pillion et al., 2012; Stansbury et al., 2012).

Pillion et al. (2012) found that the majority of Catholic priests in their sample correctly identified mental illness; additionally, enough participants indicated a lack of trust in MHPs from different faiths to warrant the researchers to call for additional MHL training. Although they did not use the MHLS, they showed that belief systems may negatively impact aspects of MHL, including recognition of appropriate mental health providers. Therefore, Pillion et al. (2012) concluded a need for additional MHL training, even though clergy participants had demonstrated MHL skills. Similarly, Chevalier et al. (2015) concluded that the clergy sample both demonstrated and required mental health training. Their mixed methods study showed that clergy could recognize some mental illnesses (i.e., depression, suicidal ideation), although they were not able to recognize a number of other serious disorders (i.e., alcohol abuse, dysfunction caused by traumatic brain injury). Finally, Stansbury et al. (2010) found that MHL was evident in the clergy sample, while the need for additional MHL training also became manifest. As in the results of my investigation, these previous studies suggested that clergy displayed MHL

skills and would benefit from additional trainings in MHL in order to provide improved services and increase referrals to MHPs, when necessary.

Additionally, the results of this study revealed that the rates of MHL among clergy of different denominations, age, geographical locations, years of post-secondary schooling, and degree-type remained stable. These findings provided information about clergy that suggested that they generally understand MH issues, regardless of their educational and demographic characteristics. Only number of clinical MH training courses and female gender significantly predicted higher MHL scores. The results of my study provided an initial measure of US Christian clergy's MHL rates and supported the administration of the MHLS (O'Conner & Casey, 2015) as a reliable measure of MHL, potentially valuable for measuring the results of subsequent studies and future educational campaigns. Additionally, this finding may inform MHPs about potential interventions to support clergy MHL development and encourage interprofessional collaborations and referral partnerships, as I discuss later in this chapter.

In consideration of the MHL framework (Jorm, 2012), the results of this study raised questions about the extent to which the current definition of MHL captures the full essence of the intended construct. If MHL correlates positively with help-seeking and help-promoting behaviors, the finding of clergy's moderate MHL rates seems to contradict with previous findings of low referral rates of parishioners to formal MHPs (Aten et al., 2013; Farrer & Goebert, 2008; Standford & Philpott, 2011). Regarding the theoretical proposition about the relationship between MHL and actual help-seeking and help-promoting behaviors (Jorm, 2012), some questions remain. More specifically, other

factors, such as stigma, access, and culture, may moderate the relationship and require further investigation (Alegria et al., 2014; Link & Phelan, 2013; Pescosolido, 2013; Wright et al., 2012). Further study regarding the association between MHL and referral behaviors seems warranted, as I discuss in the recommendations section.

Limitations

In this study, I anticipated limitations with external validity due to my use of a non-probability sample, web-based administration, and precompiled contact list (Baker et al., 2010; Wiles et al., 2005). The use of a nonprobability sample meant I could not ascribe causal connections among the test variables (Creswell, 2013). Due to the web-based administration and type of contact list, the results of this study are generalizable to only the listed clergy members with active email addresses. Still, the large number of contacts on the list (i.e., 109,000) provided access to a large, national cross-section of diverse clergy participants.

Regarding the sampling frame, researchers posited that the *opting-out* option inherent in precompiled lists may translate into self-selection bias (Baker et al., 2010; Wright, 2005). For example, the respondents in my study were highly educated in comparison with other religious studies research, a finding that may reflect an inherent interest in scientific research and, therefore, potential biases. Future researchers who choose different recruitment methods may garner participants with different educational levels and biases (Groves et al., 2009). Since the results of my study indicated that number of years of post-secondary school was not a significant predictor of MHL, future studies with a sample more representative of typical educational levels might reveal

different results. In compliance with ethical mandates regarding non-coercion recruitment methods (ACA, 2014), however, I had to include the *opt-in* option and could not avoid this external validity risk.

Another limitation of this study involved the small sample size of the Historically Black Protestant group. Although ANOVA is robust to small and unequal sample sizes (Field, 2013), a larger number of participants for this categorical group may have resulted in a different group mean score. Future researchers may choose to offer a larger number of denominational affiliation categories with more specific choices to offset this limitation. I chose to delimit my study to only the four major categories so that the required sample size would not be prohibitive to the practical limits of my study. Additionally, I delimited the study to include only Christian clergy in the US due to the lack of such investigations. However, future researchers may investigate and compare Christian clergy with other non-Christian leaders and produce informative results.

In choosing the cross-sectional survey method, I circumvented some of the inherent threats to internal validity, such as those related to experimental mortality, history, and maturation effects (Campbell et al., 1963; Creswell, 2013). However, my study was limited due to the lack of controls in place for the web-based administration of the instrument (Groves et al., 2009). Due to financial and procedural restraints involved in a doctoral level study, my choice of the web-based administration was one of convenience. However, researchers have found web-based methods useful and accurate, especially when they include the use of appropriate sample size, power, and transparent methodology (Funder et al., 2014; Groves et al., 2009; Wright, 2005). With appropriate

safeguards, web-based administrations continue to advance the social science research field; furthermore, researchers use the cross-sectional survey method for investigating property-disposition relationships, which remain ethically difficult to measure via true experimental methods (Frankfort-Nachmias & Nachmias, 2008; Wright, 2005).

Limitations related to instrumentation involved the unique nature of the MHLS (O'Connor & Casey, 2015). Being a new instrument, the MHLS currently lacks some validity measurements (O'Conner & Casey, 2015). First, O'Connor and Casey (2015) were unable to assess criterion validity because no other parametric measurements existed by which to compare the MHLS. They are currently examining cross-cultural validity and instrument-responsiveness domains. Thus far they have examined six of the nine validity domains recommended by statisticians (Mokkink et al., 2010), including measures of internal consistency, reliability, measurement error, content validity, structural validity, and hypothesis testing, all demonstrating adequate results. Additionally, the MHLS scores from this study demonstrated reliability and internal consistency rates, showing acceptable Cronbach's alpha ($\alpha = .85$) and standard error values, as demarcated acceptable by previous statisticians (Creswell, 2013; Field, 2013).

In this study, I sought to understand the MHL of a broad section of Christian clergy in the US. Accordingly, the accuracy of the results depended on the trustworthiness and integrity of clergy members' responses, such as their willingness to openly disclose educational levels, professional roles, and current understanding and attitudes regarding mental illness (Wright, 2005). The accuracy of the data also may hold inherent risks due to the lack of experimental controls for testing administration,

potentially resulting in technological challenges, personal time constraints, and other distractions (Creswell, 2013; Funder et al., 2014; Wright, 2005). Additionally, measuring knowledge and attitudes of Christian clergy remains limited by the nuanced operational definitions of MHL, *Christian clergy*, and the predictor variables under investigation. I purposefully endeavored to provide a thorough literature review in order to substantiate my operational definitions of these constructs. However, future studies may challenge these definitions, and I encourage replication to ensure data quality.

Recommendations

The final results of this study prompted several research ideas for future investigations. I measured the MHL rates of a diverse sample of Christian clergy in the US; however, comparisons with other studies were not possible due to the newness of the MHLS. Also, this study was the first administration of the new instrument with clergy populations. Recommendations for future research include the administration of the MHLS (O'Conner & Casey, 2015) among Christian clergy of different denominations, non-Christian clergy, different types of MHPs (i.e., counselors, social workers, psychologists), and various demographic groups and general populations in order to establish comparative data from diverse populations and professional groups. Understanding where the MHL rates of clergy stand in relation to their communities may provide insights into how to address clergy and MHP partnerships among specific populations where low MHL rates have become manifest (Alegria et al., 2014; Jorm & Kitchener, 2011; Lopez et al., 2012; Snowden, 2012). Ideally, direct statistical comparisons between clergy and their professional counterparts could produce data to

inform future interprofessional collaborations, partnership needs, and referral opportunities (Thomas, 2012). With benchmarks provided by repeated administrations of the MHLS, researchers also can measure improvements in MHL rates in order to substantiate the effectiveness of the various training programs, MHL campaigns, and educational interventions.

Results of this dissertation study showed that number of clinical MH counseling courses accounted for variations in MHL scores of clergy, regardless of degree-type. Hence, it seems that increasing interprofessional trainings and collaborations between clergy and MHPs may increase clergy members' MHL and, therefore, their willingness to act as conduits to the formal mental health system. However, previous researchers showed that many clergy participants did not respond positively to uni-directional trainings that seemed to underestimate their professional competencies (McMinn et al., 2010; Sullivan et al., 2013). Therefore, future studies could address what type of trainings and collaborations might encourage interprofessional collaborations and referral partnerships with clergy counterparts. As discussed by Standford and Philpott (2011) and Cashwell and Watts (2010), it is incumbent upon MHPs to take the initiative to investigate what type of professional outreach may encourage the most effective collaborations.

The behavioral models position health literacy in relation to relatively static variables, such as age, gender identity, SES, culture, and geographical location (Andersen, 1995; Pescosolido, 2013). This study suggested that clergy participants' MHL scores remained unaffected by some of these previously identified barriers to health

literacy. Therefore, future studies could investigate potential explanations for why and how clergy members' MHL rates did not follow the trends of the general population, which previously showed that younger age, rural locations, minority culture, and fewer years of formal schooling significantly, negatively predicted MHL (Andersen & Newman, 2005; Goodwin & Andersen, 2002; Pescosolido, 2013). Insights may inform social justice researchers how to address disparities present in communities or populations with low MHL.

Additionally, future researchers can examine and compare MHL among different and specific denominational affiliations in order to confirm or challenge the insignificant findings from this current study. Researchers have found that culture and denominational affiliations can be inseparable (Brunn, 2015; Carroll, 2002). Therefore, repeated studies regarding MHL and denominational affiliation may provide valuable information about the relationship between cultural variations and MHL.

Results of this study also provided insights about the complex structure of MHL. The conceptual framework of MHL has been part of social science research and advocacy campaigns for 20 years (Jorm, 2012). Resulting findings from these studies have shown that MHL involves several underlying factors linked into one overarching theoretical construct. In response to these findings, O'Conner and Casey (2015) created the MHLS, which has six subscales, each pointing to a different aspect of MHL. The subscales measure "ability to recognize disorders… knowledge of where to seek information… knowledge of risk factors and causes… knowledge of self-treatment… knowledge of professional help available… and attitudes that promote recognition or

appropriate help-seeking behavior" (p. 5). The MHLS provides the first parametric measurement of the complete construct of MHL. As measured by the subscales of the MHLS, future studies could address which aspects of MHL (i.e., knowledge versus attitudes versus behaviors) manifest more robustly among different populations. Given the extensive research on stigma (Link & Phelan, 2013; Pescosolido, 2013; Reavley et al., 2012; Yap et al., 2011), it is foreseeable that participants' beliefs and attitudes may strongly impact many of the MHL findings in this and previous studies.

Additionally, researchers posited that the significant findings of female gender as a predictor of higher MHL also related to the beliefs and attitudes (i.e., stigma) subscale (Pescosolido, 2013; Reavley & Jorm, 2012; Yap et al., 2011). My study showed that female gender identity did significantly predict MHL; therefore, additional investigation into the potential link between gender identity, stigma, and MHL seems warranted. Potentially, since gender identity is a relatively static variable, future MHL campaigns could target a reduction of stigma as a way to increase MHL rates equally highly among individuals of different gender identities.

Furthermore, I recognize that beliefs and attitudes may have impacted the data collection process in this study, as well as clergy participants' MHL scores overall. As evident from their professional roles, clergy hold to specific beliefs patterns and convictions (McMinn et al., 2010). As an example, one clergy responded to my request for participation with the following response:

> I am afraid I cannot fill out your survey. Question #2 asks for my gender orientation and gives three options. There is only male and female as created by

> God. May the Lord bless you in your research, but I cannot participate in a survey that does not even recognize the authority of God's Word in an attempt to help clergy (anonymous email communication reprinted with permission, April 14, 2016).

This response may highlight a problematic pattern of interactions between MHPs and clergy who, as expressed by the above quote, would not participate fully in my research due to the scientific language of the demographic questionnaire. In my quest to honor ethical obligations of gender inclusiveness (ACA, 2014), I inadvertently alienated and offended a participant who, after reading the gender identity question, refused to complete the survey.

It is unknown how many other clergy members share these beliefs and convictions; furthermore, it is possible that a number of potential clergy participants sharing these same beliefs did not participate in my study, thereby skewing the results of the investigation. Neither the demographic questionnaire nor the MHLS provided space for clergy participants to reflect on the impact of their attitudes and beliefs on their MHL. For that reason, I suggest that future studies assume a qualitative or mixed methods approach to ensure that the full measure of clergy MHL, including subjective beliefs and attitudes, becomes manifest.

Finally, the results of this study provided an initial investigation into the MHL rates of Christian clergy across the US. This study was the first study in a potential area of research that may be useful for addressing mental healthcare disparities in the US. With better understanding of the MHL of clergy members, future researchers can

hypothesize and explore the relationship between MHL rates and referral patterns between clergy and MHPs (Hedman, 2014). Ideally, subsequent studies will use *MHL rates*, as measured by the MHLS (O'Conner & Casey, 2015), as the independent variable and *referral rates*, as the dependent variable. Results of these types of investigations may inform whether MHL scores predict referral patterns. If no significant findings emerge, researchers should investigate other proposed explanations (i.e., lack of interprofessional trust, historical tension) for low referral rates between clergy and MHPs, which remain unfortunate patterns in need of robust investigation (Hedman, 2014; McMinn et al., 2010; Sullivan et al., 2013). Overall, subsequent research may illuminate and explain the current state of poor interprofessional collaboration and referral partnerships that undermine the effectiveness of clergy serving as conduits between MHPs and parishioners with SMI.

Implications

The results of this study provided the first assessment of the MHL rates of a diverse cross-section of Christian clergy in the US. Although no significant differences between the MHL scores of clergy from different denominational affiliations emerged, the overall mean scores in each category suggested that Christian clergy are somewhat prepared in their knowledge, attitudes, and behaviors toward mental illness. However, clergy participants' scores were substantially lower than the mean score of the benchmark MHP group, showing a need for additional clergy training. Regarding such training, the multiple linear regressions revealed significant findings with related implications for how, where, and with whom to improve interprofessional trainings, collaborations, and

referral partnerships. These findings concurred with previous researchers who found that a majority of clergy still feel unprepared to work effectively with parishioners with SMI and desired additional training (Payne, 2013; Pickard, 2012; Standford & Philpott, 2011; Stansbury et al., 2011). In the next three sections, I describe potential implications from the results of this study, including discussions about (a) inspiring positive social change among communities via increasing MHL, (b) exploring methodological and theoretical changes for future studies, and (c) enhancing interprofessional trainings and referral partnerships between clergy and MHPs.

Social Change Implications

Supporting the key social change issue of this study, the results of this study implicate the potential for a reduction of mental healthcare disparities via clergy serving more frequently and effectively as liaisons between the formal mental healthcare system and those in need of treatment. At the societal level, policy-makers have realized the importance of clergy successfully filling the role of promoters of health and mental health care to their parishioners (Lopez et al., 2012; Snowden et al., 2012; Sue et al., 2012). In order to fill this role more effectively, clergy must recognize SMI, understand accurately about effective help-seeking behaviors, and hold positive attitudes toward those with mental illness and their local MHPs (Jorm, 2012). Stated succinctly, clergy's effectiveness largely depends on their MHL.

According to researchers, MHL encompasses accurate recognition, knowledge, and beliefs about mental illness and precedes effective help-seeking and mental health care promotion (Jorm, 2012; O'Conner et al., 2014; Snowden, 2012). The results of this

study revealed that the mean MHL score for clergy participants of all denominational groups was an average of 10 points lower than the MHL scores of the benchmark rating for MHPs. This comparison demonstrated a need for additional trainings to increase clergy members' capacities to fill the role of de facto and front-line mental health worker more effectively. According to the MHL framework (Jorm, 2012; O'Conner & Casey, 2015) and results of this study, increasing MHL rates of clergy from all denominations remains essential and may serve to increase promotions to the formal mental health care system and reduce current disparities.

Additionally, the results of this study indicated that mental health training courses increased MHL, regardless of the number of years and type of clergy's prior schooling. Given that most divinity schools do not offer much training or coursework in clinical mental health (Ross & Standford, 2014), the implications of this finding are considerable. By offering continuing education courses in clinical mental health training, MHPs may better support clergy in their roles as informal providers and increase referral rates, as needed. Not only could interprofessional trainings increase the MHL of individual clergy, but also the interactive opportunities created by such trainings may enhance interprofessional collaboration and, therefore, reduce current mental healthcare disparities. As a practical example, counseling professionals could advertise available mental health trainings via intercollaborative listservs and online training forums.

By working together to reduce mental health care disparities, clergy and MHPs demonstrate the potential for achieving positive social change at the individual and societal levels. With an increase in the MHL rates of clergy, those populations currently

underserved by MHPs, including African-American, Asian, Latino/Hispanic, elder, female, and rural groups, could learn from their trusted clergy where, how, and from whom to seek help (Alegria et al., 2014; Chatters et al., 2011; John & Williams, 2012; Jones et al., 2011; Keyes et al., 2011; Kirchner, 2011; Pickard, 2012). After participating in targeted interventions to increase their MHL, informed clergy may recognize SMI and increase their number of referrals to appropriate providers (Farrell & Goebert, 2008; Standford & Philpott, 2011; Thomas, 2012). As shown by the non-significant results of this study, clergy of all denominational affiliations, age groups, levels of educational attainment, and geographical areas could benefit equally from such training interventions.

Accordingly, the results of this study suggest to counselors and counselor educators how to enact positive social change via offering mental health training to willing clergy in their communities. Previous researchers have shown that the most effective way to offer such trainings is through the establishment of mutual relationships, bi-directional trainings (i.e., where clergy also train MHPs to diagnose spiritual issues in their clients), and interprofessional referral partnerships (Aten et al., 2013; Chevalier et al., 2015; Sullivan et al., 2013). To offer effective trainings, counselors and counselor educators should pursue research to determine effective ways to build such collaborative relationships.

Theoretical and Methodological Implications

Understanding MHL rates remains only the first-step in the process of changing help-seeking behaviors (Jorm, 2012; Rosetto, Jorm, & Reavley, 2014). The goal of MHL research and subsequent campaigns has been to increase MHL and, thereby, encourage

help-seeking behaviors for better health outcomes, especially for marginalized populations (De Hert et al., 2011; Jorm, 2012; Snowden, 2012). However, in their meta-analyses of MHL, Griffiths et al. (2012) found that increasing accurate knowledge, beliefs, and attitudes about mental health issues did not lead to significant increases in help-seeking behaviors. It seems that help-seeking for mental health issues may involve additional variables, currently not explained by the mental or physical health care literature.

The results of this study implied a similar finding. If clergy demonstrate general MHL skills, as I found in this study, but not help-promoting behaviors, as previously discussed (Farrell & Goebert, 2008; Standford & Philpott, 2011), it may be appropriate to question whether the conceptual framework of MHL conveys the full skill-set required to increase actual help-seeking behaviors. Because research in the area of *actual* help-seeking behaviors for mental health remains scant, researchers have not firmly established the link between MHL and help-seeking and actual help-promoting behaviors. Consequently, researchers have questioned the need for testing additional variables, including external barriers (i.e., access to and cost of mental health care), cultural beliefs, and trust in MHPs, and the impact of these variables on MHL and subsequent help-seeking behaviors (Hedman, 2014; Link & Phelan, 2013; Olafsdottir & Pescosolido, 2013; Pescosolido, 2013; Rosetto et al., 2014). Theoretically-speaking, it is foreseeable that additional factors (i.e., access, cost, culture, trust) could become part of the formal MHL framework to make it a more effective conceptual tool for change.

Methodological implications follow these theoretical wonderings. Theories require years of testing and development (Reynolds, 2015). To that end, explorative research on the integration of additional and underlying factors of MHL (i.e., access, cost, trust, culture variables) into the conceptual model requires additional research efforts (Pescosolido, 2013). Such calls for research to address the inclusion of these additional variables have manifested in the MHL literature (Link & Phelan, 2013; Mojtabai et al., 2011; Olafsdottir & Pescosolido, 2013; Rosetto et al., 2014; Sai & Furnam, 2013).

The potential addition of underlying factors into the MHL framework would require extensive research and revision of the MHLS and other MHL measures. Reflecting 20 years of MHL research, O'Conner and Casey (2015) diligently crafted the current MHLS to include the MHL model's six subscales, which measure knowledge, attitudes, and beliefs about mental illness and help-seeking. Potentially, additional variables could enhance the current model. For example, future researchers could develop the knowledge scale portion of the MHLS to measure knowledge about *affordable* mental health care. Additionally, the stigma scale could address cultural beliefs about MHPs as well as those with SMI. In fitting with prior findings and methodological recommendations (Mojtabai et al., 2013; Pescosolido, 2013), the results of my study implied the need for future investigations about the inclusion of these additional or revised factors to the conceptual model and related measures of MHL.

Furthermore, comprehensive understanding of the clergy's MHL may require supplementary methods of investigation. As inferred by the clergy participant who was offended and alienated by the methods of this study, the attitudes and beliefs (i.e., stigma)

component of MHL may require qualitative methods to convey more adequately how different attitudes and beliefs impact rates of MHL (Keane, Lang, Craven, & Sharples, 2012). Methodologically-speaking, the results of my current study implied that understanding clergy MHL rates may require additional qualitative and mixed methods investigation of potential aspects of MHL not yet revealed by the current model.

Practice Implications

The results of this study inform practice recommendations for counselors and counselor educators. Most generally, the results showed that counselors and counselor educators in all areas of the country may create positive social change initiatives by implementing MHL trainings and collaborations with clergy members from all denominational affiliations in their communities. Practically, counselors and counselor educators could set up monthly, interfaith collaborative meetings to discuss ways in which clergy could support clergy in their outreach and pastoral counseling work. Depending on the interest and knowledge of clergy, mental health professionals could offer mental health seminars, conduct trainings, and offer low-cost services for future referrals. Additionally, they could seek assistance from clergy for spiritual training and resources in order to provide enhanced counseling to their clients.

While previous researchers advocated targeting seminary and divinity schools to improve clergy MHL (Ross & Stanford, 2014), establishing such interventions may be challenging, especially given the historical mistrust between the religious and the mental health professions (Sullivan et al., 2013). Providing a potential alternative, the results of my study showed that offering post-graduate mental health training coursework outside

of traditional divinity schooling may deliver the best model for increasing MHL rates. Hence, the findings encourage counselors and counselor educators about the potential efficacy of providing mental health training courses to local clergy. Furthermore, the results of my study showed that such trainings may increase MHL, regardless of clergy's age, geographical location, years of schooling, or denominational affiliation, which were not significant predictors of MHL scores.

Regarding MHL trainings, previous researchers showed that counselors and counselor educators can promote collaborations with community clergy via bi-directional training and referral partnership opportunities (McMinn et al., 2010; Sullivan et al., 2013). Mutuality seems vital to the success of such collaborations (Sullivan et al., 2013; Thomas, 2012). Practically then, counselors could initiate meetings with local clergy to establish reciprocal and collaborative partnerships, jointly focusing on a reduction of mental health care disparities in their communities. Likewise, counselor educators could participate in such trainings, model effective interprofessional collaboration, and provide training to counseling students.

More specifically for counselor educators, the practical implications of this study are two-fold. First, it is incumbent upon counselor educators to model collaborative and respectful partnerships with clergy to their counseling students. Such modeling has shown to increase the ability of counselors to work with indigenous and spiritually-minded clients and their cultural and spiritual leaders (Dobmeier & Reiner, 2012). In fact, research has shown that through modeling collaborative relationships and providing experiential learning opportunities, counselor educators have increased cultural

competence in student counselors (Dobmeier & Reiner, 2012; Vogel, McMinn, Peterson, & Gathercoal, 2013). However, research for effectively teaching such skills to counseling students remains scant in the counselor education literature and curricula (Adams et al., 2014; Dobmeier & Reiner, 2012; Shaw, Bayne, & Lorelle, 2012). According to the *Standards* (CACREP, 2015), *Multicultural and Social Justice Counseling Competencies* (MCSJCC) (Ratts et al., 2015), and *Spiritual Competencies* (Cashwell & Watts, 2010), collaborating with cultural leaders and local indigenous helpers is an ethical mandate when working among diverse populations. Therefore, it is incumbent upon counselor educators to impart the knowledge, attitudes, and skills for counseling students to graduate with the abilities to provide MHL training partnerships and opportunities with clergy in their communities.

Second, counselor educators stand as the researchers and research mentors of the counseling profession. Since its inception, the counseling profession has boasted of its wellness-and strengths-based models (Kaplan et al., 2014). Additionally, traditional wellness models showed spirituality at the center of mental health (Meyers & Sweeney, 2008). To that end, counselor educators remain the gatekeepers to the counseling profession and responsible guardians and promoters of a body of research focused, at least in part, on the importance of spirituality to mental health wellness. Counselor educators can improve how counselors apply this ethical charge via evidenced-based research regarding the formation of effective interprofessional collaboration and referral partnerships with local clergy.

Conclusion

In this study, I used the MHL and behavioral model frameworks to investigate whether denominational affiliation, educational variables, and demographic characteristics predicted the MHL scores of a diverse sample of Christian clergy in the US. Only the number of clinical mental health training courses and female gender identity predicted higher MHL scores in the sample of 238 clergy participants. These significant findings confirmed the importance of continued MHL trainings for clergy providers. The results also showed that the typical variables associated with low MHL (i.e., younger age, rural location, fewer years of education) did not significantly impact MHL scores of the clergy sample. Therefore, future researchers should investigate whether clerical experiences, beliefs, and characteristics may inform adjustments to the MHL and behavioral models. Insights from this study and previous investigations (McMinn et al., 2010; Sullivan et al., 2013) also suggested that some qualitative exploration may further understanding of how clergy members' attitudes toward MHPs hinder or help the effectiveness of interprofessional collaborative and referral partnerships.

The results of the ANOVA showed no significant differences between MHL scores of clergy from different denominational affiliations. Therefore, counselors and counselor educators can be confident that clergy of all ages, locations, denominational affiliations, and educational backgrounds may appreciate and value interprofessional trainings and dialogic opportunities to address MHL, as has been suggested by previous researchers (Payne, 2013). Furthermore, counselors and counselor educators aiming to

provide such continuing educational campaigns and workshops in their communities should offer bi-directional trainings and collegial discussions so as to encourage mutually effective and reciprocal collaborations and referral partnerships (McMinn et al., 2010; Sullivan et al., 2013).

From a broader perspective, clergy participants showed some MHL skills when compared to O'Conner & Casey's (2015) community sample. According to the pilot testing of the MHLS (O'Conner & Casey, 2015), clergy participants scored higher than a benchmark community sample but lower than the MHP sample. This general comparison offered an important baseline measure of a diverse, national sample of Christian clergy in the US and endorsed the need for increased MHL trainings and improved referral partnerships between clergy and MHPs. Because this study marked the first quantitative examination of the MHL rates of a denominationally-diverse sample of Christian clergy in the US, I recommend future confirmatory research efforts. Additionally, the pioneering aspects of this study provided information to counselors and counselor educators that may assist their pursuit of interprofessional collaborations with local clergy and positive social change initiatives to address mental health care disparities.

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Appendix A

Jodi Vermaas <jodi.vermaas@waldenu.edu> Thu, Jan 7, 2016 at 10:53 AM

To: IRB <irb@waldenu.edu>

Hello,

I am currently working on dissertation research. I am wondering if there are any IRB or ethical reasons to reject using purchased lists to identify participants for a study. Of course, the same volunteer, opt out, informed consent processes would be clearly maintained.

Thank you for your assistance,

Jodi Vermaas
Student ID: A00260783

IRB <irb@waldenu.edu> Mon, Jan 11, 2016 at 6:35 PM

To: Jodi Vermaas <jodi.vermaas@waldenu.edu>

Hi Jodi,

Many researchers do purchase lists for contact information, as for some organizations, this is the only way they make that information available. In your IRB materials, you would need to identify from which organization(s) you are purchasing the contact information. On your participant facing materials (such as the invitation letter or consent form) you may also want to add a statement explaining how you obtained their contact information. You don't necessarily need to disclose you purchased it, but some people are wary of how their contact information was obtained, and your explanation would help clarify.

Sincerely,

Libby Munson
Research Ethics Support Specialist
Office of Research Ethics and Compliance
Walden University
100 Washington Avenue South, Suite 900
Minneapolis, MN 55401
Phone: (612) 312-1283
Fax: (626) 605-0472

Appendix B

Dear Colleague:

I am a doctoral student in the Counselor Education and Supervision Program at Walden University. I am also an ordained children's and women's ministry leader and pastoral counselor. Currently, I am conducting research on *Clergy Characteristics and Mental Health Literacy*. The purpose of this brief, online survey is to investigate Christian clergy's knowledge, beliefs, and attitudes regarding mental illness. As both a licensed mental health professional and clergy member, I intend for this research to inform both clergy and mental health professionals how they can improve interprofessional collaborations and referral partnerships.

To participate, you will complete the 35-item survey and a brief demographic questionnaire. The survey measures your ability to recognize specific mental health issues and related help-seeking beliefs and attitudes about mental illness. For example, these questions ask how likely you may be to recognize a disorder given a description of symptoms, how helpful you view various responses to mental health treatment, and how likely are your responses to those with mental health issues. Completing the survey should take about 15 minutes. The study was approved by Walden University's Institutional Review Board on [date].

This email invitation is being sent to you because you or your church participates in an online church database by which your email contact was identified, verified, and made available by APC Services, Ltd. To participate, you must be adult (18 years or over) Christian clergy, defined as any *church deacons, elders, leaders, ministers, pastors, priests, and teachers who interact with church attendees using the Bible and Jesus Christ as the foundational belief system.* Your participation is completely voluntary and you may withdraw from the study at any time. No significant risks to your safety or wellness have been identified.

As a benefit of your participation, the results of this study will provide data for improving interprofessional relationships between clergy and mental health professionals as part of a larger effort to reduce current mental health care disparities. Approximately 180 Christian clergy will be participating in this study. All identifying personal information from the database list remains separate from the collected data. All collected data regarding personal information will be collected anonymously via an online service.

Only the researchers and authorized accountability representatives from Walden University may review the data. I hope the results will inform and encourage inter-professional dialog and collaboration. If you would like to review the results, you can use the provided link at the end of the survey. This link will give you access to a copy of

the summary of the research results, once completed. Finally, if you want to opt-out of the public church database list, please contact APC Services, Ltd., directly.

To complete the survey, please go to the following research survey link, which will lead you first to the informed consent document:
[survey monkey]

Thank you for your consideration, participation, and contribution!

Jodi D. Vermaas, LMHC, NCC

Jodi.vermaas@waldenu.edu

Appendix C

Informed Consent Form

This document provides information and consent regarding my invitation to you to participate in my doctoral dissertation study about Clergy Characteristics and Mental Health Literacy. You are being asked to participate because you are Christian clergy working with parishioners using the Bible and Jesus as the foundation of faith. Please read this form and ask any questions that may arise prior to agreeing to participate. The student researcher, Jodi Vermaas, MS, LMHC, is a full-time doctoral student at Walden University and will be conducting the study.

Background:

Each year millions of people rely on their clergy to meet their mental health needs. In response, clergy may use their knowledge, beliefs, and attitudes about mental illness, termed *mental health literacy*, to attend to the needs of their congregations. Using the results of the online survey, I will investigate Christian clergy's knowledge, beliefs, and attitudes about mental illness, which is a currently underexplored topic in the research literature. The results may inform counselors and counselor educators how to improve bi-directional training and referral partnerships and opportunities with local clergy. No experimental treatments or protocols are involved in this inquiry.

Procedures:

If you agree to participate in this research, you will click the *link* button at the end of the study, which shows your willingness to participate in the study. You will then be directed to a brief demographic questionnaire, followed by a 35-item multiple choice survey that you will complete online. The survey measures your ability to recognize specific mental health issues and related help-seeking beliefs and attitudes about mental illness. For example, these questions ask how likely you may be to recognize a disorder given a description of symptoms, how helpful you view various responses to mental health treatment, and how likely are your responses to those with mental health issues. Completing the survey should take about 15 minutes. This study has been approved by Walden University's Institutional Review Board [insert number] on [date] and will expire on [date].

Confidentiality:

Your participation and data information will remain anonymous at all times. All returned surveys are sent anonymously into an online database. No email addresses or identifying information are reported back to the researcher. Furthermore, the data will be reported collectively to protect your anonymity and the anonymous data will remain confidential and password protected on a computer in a locked room. Only the researchers and authorized accountability representatives from Walden University may review this data. Data will be stored for five years as per Walden University requirements.

Voluntary Nature of the Study:

Your participation in the study is completely voluntary. You may withdraw from the study at any time by closing down the survey in your browser. No compensation will be provided for your participation.

Risks of Your Participation:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, or being upset. Being in this study would not pose risk to your safety or wellbeing. Should emotional discomfort arise from participating in the study, you can discontinue the survey at any time.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me at any time. You can reach myself, the student researcher, via email at Jodi.vermaas@waldenu.edu.

You can also contact my adviser, Dr. Judy Green, at judy.green@waldenu.edu.

If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210 or via email at irb@waldenu.edu.

I encourage you to keep a copy of this informed consent form by printing it out and saving it. No conflicts of interest have been identified. If you would like to review the results, you can use the provided link at the end of the survey. This link will give you access to a copy of the summary of the research results, once completed.

By clicking on the survey link below, you are indicating that you understand this explanation of the research, and that you agree to participate. Thank you for considering whether or not to participate in this research.
[Link to Survey]

Appendix D

Demographic Questions

Please indicate the following:

1. **Your Age in Years: _____**(rounded to the nearest year)
2. **Your Gender Identity:** Male, Female, Other
3. **Your Religious Affiliation****: Evangelical Protestant, Mainline Protestant, Historically Black Protestant, Catholic
4. **Your Primary Geographical Location:** Rural location (less than 50,000 residents), Urban location (greater than 50,000 residents)
5. **Your Numbers of Years Practicing as Christian clergy: _____**
6. **Your Numbers of Years of Schooling after High School: _____**(rounded to the nearest year)
7. **Your highest earned degree:** associates, bachelors, masters, Doctorate/ PhD
8. **Your type of degree:** Divinity, Mental Health, Other
9. **Your number, if any, of completed counseling-related courses**:_____(in whole number)

**Denominational affiliation choices based on the four broad religious affiliations in the US showing membership by over 5% of the population: (http://www.pewforum.org/religious-landscape-study/region/south/)

Appendix E

Request permission

3 messages

Jodi Vermaas <jodi.vermaas@waldenu.edu> Thu, Jan 7, 2016 at 2:32 PM
To: Leanne Casey <l.casey@griffith.edu.au>

Hello, Dr. Casey,

I am a doctoral student at Walden University's School of Counseling. I am conducting research on mental health literacy and am inquiring about permission to use your instrument, the Mental Health Literacy Scale?

The intent for use is only for research.

Thank you for your time and consideration, and for this wonderful new measure!

Jodi D. Vermaas, MS, LMHC

Leanne Casey <l.casey@griffith.edu.au> Thu, Jan 7, 2016 at 6:30 PM
To: Jodi Vermaas <jodi.vermaas@waldenu.edu>, Matt O'Connor <M.O'Connor@stpeters.qld.edu.au>

Hi Jodi

We would be very happy for you to use the MHLS . For the questions that refer to australian based data, we have been suggesting that you look at population level data for your country and adjusting the question if needed

Are you considering writing your results for publication? If so, we would be very interested in collaborating as we have a number of other projects currently underway to test the psychometrics of the MHLS in different contexts

Please keep us updated on your work as we would be really interested to hear how it progresses

cheers

Leanne

[Quoted text hidden]

--
Leanne Casey PhD MAPS MCCLP
Director of Clinical Psychology Programs
School of Applied Psychology and
Menzies Health Institute Queensland
Mt Gravatt Campus
Griffith University
Mt Gravatt 4122, Australia

Email: l.casey@griffith.edu.au
Ph: 3735 3314
Rm: 2.04, M24

Jodi Vermaas <jodi.vermaas@waldenu.edu> Thu, Jan 7, 2016 at 6:34 PM
To: Leanne Casey <l.casey@griffith.edu.au>
Cc: Matt O'Connor <M.O'Connor@stpeters.qld.edu.au>

Thank you! And yes I will keep you posted!

Wonderful! !

Appendix F

Mental Health Literacy Scale
(O'Connor & Casey, 2015)

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your degree of knowledge. Therefore when choosing your response, consider that:
Very unlikely = I am certain that it is NOT likely
Unlikely = I think it is unlikely but am not certain
Likely = I think it is likely but am not certain
Very Likely = I am certain that it IS very likely

1

If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia

Very unlikely Unlikely Likely Very Likely

2

If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have **Generalized Anxiety Disorder**

Very unlikely Unlikely Likely Very Likely

3

If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder

Very unlikely Unlikely Likely Very Likely

4

To what extent do you think it is likely that Personality Disorders are a category of mental illness

Very unlikely Unlikely Likely Very Likely

5

To what extent do you think it is likely that Dysthymia is a disorder

Very unlikely Unlikely Likely Very Likely

6

To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing

Very unlikely Unlikely Likely Very Likely

7

To what extent do you think it is likely that the diagnosis of <u>Bipolar Disorder</u> includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood

Very unlikely Unlikely Likely Very Likely

8

To what extent do you think it is likely that the diagnosis of <u>Drug Dependence</u> includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Very unlikely Unlikely Likely Very Likely

9

To what extent do you think it is likely that in general in Australia, <u>women are MORE likely to experience a mental illness of any kind compared to men</u>

Very unlikely Unlikely Likely Very Likely

10

To what extent do you think it is likely that in general, in Australia, <u>men are MORE likely to experience an anxiety disorder compared to women</u>

Very unlikely Unlikely Likely Very Likely

When choosing your response, consider that:
Very Unhelpful = I am certain that it is <u>NOT</u> helpful
Unhelpful = I think it is unhelpful but am not certain
Helpful = I think it is helpful but am not certain
Very Helpful = I am certain that it <u>IS</u> very helpful

11

To what extent do you think it would be helpful for someone to <u>improve their quality of sleep</u> if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)

Very unhelpful Unhelpful Helpful Very helpful

12

To what extent do you think it would be helpful for someone to <u>avoid all activities or situations that made them feel anxious</u> if they were having difficulties managing their emotions

Very unhelpful Unhelpful Helpful Very Helpful

When choosing your response, consider that:
Very unlikely = I am certain that it is <u>NOT</u> likely
Unlikely = I think it is unlikely but am not certain
Likely = I think it is likely but am not certain
Very Likely = I am certain that it <u>IS</u> very likely

13

To what extent do you think it is likely that <u>Cognitive Behaviour Therapy (CBT)</u> is a therapy based on challenging negative thoughts and increasing helpful behaviours

Very unlikely Unlikely Likely Very Likely

14

Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **<u>break confidentiality</u>**:

If you are at immediate risk of harm to yourself or others

Very unlikely Unlikely Likely Very Likely

15

Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **<u>break confidentiality</u>**:

if your problem is not life-threatening and they want to assist others to better support you

Very unlikely Unlikely Likely Very Likely

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
16. I am confident that I know where to seek information about mental illness					
17. I am confident using the computer or telephone to seek information about mental illness					
18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)					
19. I am confident I have access to resources (e.g., GP, internet, friends) that I can					

use to seek information about mental illness					

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
20. People with a mental illness could snap out if it if they wanted					
21. A mental illness is a sign of personal weakness					
22. A mental illness is not a real medical illness					
23. People with a mental illness are dangerous					
24. It is best to avoid people with a mental illness so that you don't develop this problem					
25. If I had a mental illness I would not tell anyone					
26. Seeing a mental health professional means you are not strong enough to manage your own difficulties					
27. If I had a mental illness, I would not seek help from a mental health professional					
28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective					

Please indicate to what extent you agree with the following statements:

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
29. How willing would you be to move next door to someone with a mental illness?					

30. How willing would you be to spend an evening socialising with someone with a mental illness?					
31. How willing would you be to make friends with someone with a mental illness?					

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
32. How willing would you be to have someone with a mental illness start working closely with you on a job?					
33. How willing would you be to have someone with a mental illness marry into your family?					
34. How willing would you be to vote for a politician if you knew they had suffered a mental illness?					
35. How willing would you be to employ someone if you knew they had a mental illness?					

Scoring

Total score is produced by summing all items (see reverse scored items below).
Questions with a 4-point scale are rated 1- very unlikely/unhelpful, 4 – very likely/helpful and for 5-point scale 1 – strongly disagree/definitely unwilling, 5 – strongly agree/definitely willing
Reverse scored items: 10, 12, 15, 20-28
Maximum score – 160
Minimum score - 35

Appendix G

Conclusion of the Survey and Final Remarks

Thank you for participating in this study!

Should you want to learn more about the intersection of spirituality and counseling, you can find information at the *Association for Spiritual, Ethical, and Religious Values in Counseling* website at

http://www.aservic.org/resources/aservic-white-paper-2/

If you desire information about counseling in general, or feel like you want to locate a licensed counselor or counseling resources in your area, you can visit the *American Counseling Association* website at

https://www.counseling.org/aca-community/learn-about-counseling/what-is-counseling

To receive a copy of the results, please email me directly. Please note, if you email me directly, I will know your contact information and that you participated in the study. However, your data will remain confidential and unconnected to your email information.

jodi.vermaas@waldenu.edu