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Examining Mental Health Literacy as a Predictor of Mental Health Service Utilization among Florida Foster Parents

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Walden University
2023

Abstract

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by

Adam Johnson

MS, Troy University, 2013

BS, Florida State University, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Counselor Education and Supervision

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May 2023

Abstract

The focus of this study was to examine mental health literacy as a predictor of the mental health service utilization of foster parents after controlling for age. There is an absence of research addressing variables that contribute to the use of mental health services by foster parents. In this nonexperimental study, survey data were collected in an electronic format. Statistical analysis was performed through use of a logistic regression. A mental health literacy conceptual framework was the theoretical foundation of the study. The sample consisted of 42 foster parents from the northwest panhandle of Florida. The study yielded findings indication that mental health literacy did not predict mental health service use. Statistically significant results were not found between mental health literacy scores, age, and mental health service utilization, χ^2 (2, N = 42) = 3.786, p = .151. A statistically significant finding in the form of a negative, moderately strong correlation was shown to exist between age and Mental Health Literacy Scale scores (r = -.393). Descriptive statistics yielded some similar trends concerning demographic information compared to prior studies. Though statistically significant results were not found in this study, the outcomes help fill a gap in the current research literature. Foster parents are underrepresented in the literature, yet this study raises questions about how future researchers might examine foster parents' attitudes and behaviors about mental health use and calls on stakeholders to legitimize mental health care a health literacy concept. Social change implications of this study center around empowering stakeholders to recruit foster parents intelligently and understand the distinct characteristics of foster parents.

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Dedication

I dedicate this work to Mackenzie, Ruth, Willis, and Criston.

Acknowledgments

I want to express deep gratitude to my dear wife, Mackenzie Johnson, for her steadfast encouragement and companionship on this very long journey. You mean the world to me.

Thank you to my children, Ruth, Willis, and Criston, for being a reason to continue and complete this project.

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To Christ the King, I owe all to You and thank You for saving me and being near in this process.

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Chapter 1: Introduction to the Study

The impact of mental health and how to conceive of it as a public health issue has been researched across the globe (Coles & Coleman, 2010; Olsson & Kennedy, 2010; Wu et al., 2017). The construct of mental health literacy (MHL) not only encompasses symptom recognition but includes the concept of maintenance and prevention steps to take to address a mental health problem in an affected individual (Jorm, 2012, 2015). There is great value in a society's ability to possess an intelligence of basic health care concepts that translate into actions that contribute to societal health. This is especially true among those having direct care over vulnerable populations, such as foster parents providing caregiving for children in foster care. Research that clearly examines MHL for foster parents is minimal and narrow in its scope of specificity (Bonfield et al., 2010; Mosuro et al., 2014). Florida ranked third highest in the nation for number of children in foster care (U.S. Department of Health and Human Services, 2022). Large numbers of vulnerable children occupy Florida's child welfare system, and yet there is no clear research addressing the state-sanctioned caregivers tasked with this responsibility. Addressing the relationship between MHL and service use among Florida's foster parents has the potential for positive social change. It is imperative to ensure that foster parents have both awareness of and ease of access to mental health services because this may lead to enhanced placement stability, retention of available foster homes, and promote better quality of life for foster parents and the children they care for.

In this quantitative, cross-sectional study, I examined if the MHL of Florida foster parents was predictive of their use of mental health service use. Improving mental health

service acquisition for foster parents is connected to the professional identity of counselors as social justice advocates but also has bearing on how stakeholders create and apply policy as well as structure training for foster parents (American Counseling Association, 2018; Toporek et al., 2009). The social change implications of this study may include a better understanding of how MHL influences the child welfare system in Florida. MHL is important because it is the capacity that empowers individuals affected by mental health problems or their caregivers and community members to know how to recognize need and seek available services (Jorm, 2012). MHL is a public health issue and was conceptualized as such in this study. Moreover, since the data collected were specific to the northwest region of Florida, insight into how MHL might be understood from a regional perspective was offered, which should be of interest to key stakeholders responsible for this region of Florida.

Background

In this study, I explored how MHL and demographic factors relate to the utilization of mental health services. Jorm (2012) comprehensively discussed the importance of MHL as a public health issue, drawing comparisons between trends of public awareness to physical health with mental health. Jorm also affirmed the need for MHL because of the often lifelong negative outcomes that follow delayed or denied mental health treatment. MHL also influences treatment access, which aligns with the mission and goals of the counseling profession (Hoven et al., 2008; Jorm et al., 1997). Researchers have indicated that, internationally, laypeople tend to have an insufficient understanding of mental health to address the public's needs (Coles & Coleman, 2010;

Olsson & Kennedy, 2010; Wu et al., 2017). Aligning with the results from international studies, Cabassa (2009) found that within the United States, the public tended to believe that mental health problems necessitate danger to others, which is not accurate. Cabassa's research exposed how a lack of understanding regarding mental health leads to misguided assumptions about people that demonstrate symptoms. Within the United States, there is also a clear absence of research addressing MHL among specific populations (Coles & Coleman, 2010; Olsson & Kennedy, 2010; Stansbury et al., 2013; Valdivieso, 2017)

Problem Statement

MHL represents the ability for individuals to assess how to obtain mental health information, possess knowledge of risk factors for and causes of mental health problems, have awareness of self-treatments, have knowledge of available professional resources, have attitudes that contribute to symptom recognition and help-seeking, and have recognition of disorders (O'Connor & Casey, 2015). Foster parents are a niche population, and there is little research exploring MHL and its effects among this population (Bonfield et al., 2010; Mosuro et al., 2014). Previous research has focused on foster parents outside of the United States and evaluated the effectiveness of interventions intended to enhance their mental health awareness, but researchers have not explored the broader concept of MHL among foster parents (Mosuro et al., 2014). Mosuro et al. (2014) recognized that mental health awareness is a component of MHL but did not quantify or explain the multiple dimensions of the MHL of foster parents. There is a distinction between MHL and mental health awareness. MHL represents a discretely defined concept about the responsibilities of individuals and community members

regarding mental health care, but the same clarity is not found in the literature surrounding the term “mental health awareness.” MHL among foster parents has received little scholarly attention internationally and is similarly neglected in research journals based in the United States. The results of this study contribute to a deeper understanding of MHL among foster parents in the United States.

Researchers have demonstrated a relationship between low levels of MHL and delayed mental health treatment (Hyland et al., 2015). In fact, other researchers have proposed that low MHL could be associated with an inaccessibility to mental health treatment altogether (Mendenhall, 2011; Mendenhall & Frauenholtz, 2015). Not knowing the MHL of primary advocates, such as foster parents, is problematic because they are responsible for helping foster children access mental health services, and a link between service accessibility and MHL has been found in prior research (Hyland et al., 2015; Mendenhall, 2011; Mendenhall & Frauenholtz, 2015).

In 2021, Florida ranked third among states for the highest number of children in foster care (U.S. Department of Health and Human Services, 2022). Of the 441,190 children in foster care across the nation, Florida accounted for 37,230 or 5.89% (U.S. Department of Health and Human Services, 2022). The rate of children in foster care in Florida in 2020 was 5.5 per 1,000 children compared to a national rate of 5.6 per 1,000 (Williams, 2022). There is an absence of research addressing the MHL of the public; moreover, there seems to be little to no attention given to special populations like foster parents. Understanding foster parent MHL is important considering that foster parents are sanctioned caregivers entrusted with many dimensions of care for vulnerable

children. Foster parents spend a great deal of time with children in their care and, so, are highly likely to encounter emotional or behavioral health needs that a foster child may have. Indeed, children experiencing contact with the child welfare system have an increased risk for lifelong social, emotional, and physical problems, which offers further support for a need to understand the role that caregivers like foster parents can have on their mental health outcomes (Fratto, 2016; Jackson Foster et al., 2015; Sempik et al., 2008). Foster parents possessing higher MHL might be better equipped to assist foster children to receive timely and appropriate care compared to foster parents with low MHL; however, the lack of available research makes this indeterminable and was one justification for the current research study.

The MHL of foster parents also has a connection to the professional identity of counselors. Counselors are integral providers within the mental health and child welfare system and have a distinct responsibility for advocating for social justice (American Counseling Association, 2018; Toporek et al., 2009). Not knowing the MHL level of foster parents disempowers counselors to properly advocate for the mental health needs of foster parents and foster children. For at-risk populations, such as foster children, this is an ethical concern, especially considering the responsibility for counseling professionals to advocate for equitable access to treatment (American Counseling Association, 2014).

Not only is the MHL of foster parents an issue relative to the profession of counseling, but it also has broader sociopolitical implications as a public health issue (Jorm, 2012). Just as counseling professionals may be rendered unable to properly

advocate for the needs of foster parents and children in their care by not knowing MHL levels, community stakeholders and policy makers may also lack clarity about how to direct funding, create relevant policy, and bring MHL within the child welfare system to the forefront of public discussion. Knowing the baseline MHL of Florida foster parents and the extent that MHL predicts foster parent use of mental health services may be useful in sparking meaningful social change. This study filled a gap in the literature by determining the MHL of Florida foster parents and examining MHL as a predictor of mental health services utilization.

Purpose Statement

I used a quantitative, nonexperimental approach to determine if the MHL of foster parents predicted utilization of mental health services after controlling for age. Age, gender, marital status, labor force status, and level of education have had influence on mental health service use (Parslow & Jorm, 2000). In this study, I controlled for age specifically because its influence on attitudes toward mental health and service use was unclear and warranted research attention. Previous research has indicated age as being associated with help-seeking attitudes toward mental health care (Bradbury, 2020). Conversely, Gonzalez et al. (2011) found that adults below age 34 had more positive outlooks on mental health treatment and used services more. I measured the level of MHL by administration of the Mental Health Literacy Scale (MHLS; see O'Conner & Casey, 2015). I determined mental health service use through nominally based questions. An electronic survey approach was for data collection, and a logistic regression was performed for data analysis.

Research Question and Hypotheses

RQ: Does the MHL, as measured by the MHLS, of Florida foster parents predict their mental health service utilization after controlling for age?

H_0: The MHLS scores of foster parents do not predict service utilization after controlling for age.

H_1: The MHLS scores of foster parents predict service utilization after controlling for age.

Theoretical Framework

MHL is a concept developed by Jorm (2000) as being essential for calling widespread attention to the recognition, maintenance of care, and prevention of mental health problems. The concept of MHL consists of six components: recognizing symptoms, knowledge and beliefs about causes, self-help attitudes and beliefs, attitudes and beliefs toward professional help, moderating beliefs that lead to appropriate help seeking, and knowing how to obtain information (Jorm, 2000). The idea of MHL rests upon the assumption that someone affected by mental health symptoms inevitably tries to manage them and that by increasing their MHL or that of those around them, they have a greater chance for gaining wellness (Jorm, 2000). In this framework, Jorm emphasized the public's responsibility to care for themselves and others by knowing how and when to seek out formal care rather than delay treatment due to it not being recognized. An empowered populous that can advocate for their own health needs is assumed when MHL is strong. Jorm's conceptual framework was fundamental to this study and informed my

assumption that higher MHL among Florida foster parents would predict mental health service utilization.

Nature of the Study

In this quantitative, cross-sectional study, I used a survey design that was used in a prior study also addressing MHL (see Lam, 2014). Online surveys were used to collect data. The survey included the MHLS, which is a validated measure used to specifically assess MHL (see O'Connor & Casey, 2015). I also collected demographic information from the participants, including their age, gender, location, race, level of education, religious orientation, sexual orientation, and economic class. Participants were recruited through purposive sampling via electronic invitation mediated by licensing agencies. I focused my data collection specifically on foster parents in the northwest region of the Florida panhandle.

Variables

The variables analyzed in this study were MHL and age with age being a covariate. The main predictor variable in this study was MHL level, which was measured by MHLS scores. I conducted a logistic regression analysis to determine the strength of association with use of mental health services by foster parents. Mental health service use was the dependent variable for this study and was categorically measured in terms of "use" or "no use." I also collected demographic data to describe the sample, which included gender, age, location, race, level of education, religious orientation, sexual orientation, and economic class.

Definitions of Key Terms

Foster parent: An individual who is state approved for the care of dependent children entering the foster care system due to child welfare involvement and is responsible for the daily care, advocacy, and physical and emotional safety of those in their care (Le Prohn, 1994).

MHL: Jorm (2000) described MHL as:

> Knowledge of how to prevent mental disorders, (b) recognition of when a disorder is developing, (c) knowledge of help-seeking options and treatments available, (d) knowledge of effective self-help strategies for milder problems, and (e) first aid skills to support others who are developing a mental disorder or are in a mental health crisis. (p. 231)

Mental health services: Any service provided by a mental health professional, psychologist, psychiatrist, clergy, or medical practitioner with the intent of addressing mental health (Howard et al., 1996).

Assumptions

There were several key assumptions associated with this study. While I did not use randomized sampling, I assumed that the sample obtained would be generally representative of most foster parents in northwest Florida. I also assumed that participants would provide honest responses to the survey. Additionally, this study depended on survey responses through an electronic format, so it was assumed that respondents would be able to understand survey questions and authentically respond to survey items. An additional assumption was that the predictor variable of MHL and sociodemographic

features of Florida foster parents would have an influence upon the frequency of their mental health service use.

Scope and Delimitations

In this study I sought to determine the MHL and use of mental health service of foster parents in northwest Florida. Research addressing the overall MHL of foster parents is absent in the literature as is an overall assessment of how MHL might relate to foster parents' use of mental health services. There is research showing that attitudes related to mental health are associated with increased use of mental health services (Coles & Coleman, 2010).

Given the lack of literature available regarding MHL and foster parents, I specifically targeted Florida foster parents. I focused this research study on Florida foster parents for several reasons. Florida's high rate of children in foster care is concerning and given the relationship between foster parents and foster children, there is a social change impetus to study foster parents. I did not focus upon mental health service use by children in foster care. The current literature available does not offer clear data about foster parents; therefore, I conducted this study to provide insight into the demographics of foster parents in northwest Florida, their levels of MHL, and their use of mental health services. The anticipated ease of accessibility to foster parents residing in northwest Florida also influenced my decision to study them. Regional differences in accessing foster parents vary widely throughout the state, and I had direct knowledge about how to access foster parents in northwest Florida; thus, I limited my study to foster parents licensed in this region of the state. As a former foster parent, I remained mindful of

researcher bias and practiced sensitivity to how this might influence my interpretation of the findings throughout the course of the study.

Limitations

I identified multiple key limitations associated with this study. I used an electronic survey to collect data from foster parents in a specific region of Florida, and there were inherent limitations to consider with this method of data collection. There was the potential for a limited response rate, and if an adequate sample was not achieved, then I would have expanded the reach of the study to other regions of Florida until the appropriate sample size was met. Additionally, an electronic format relies upon participant competency using technology and access to internet service. Much of the region of the Florida panhandle consists of rural areas, so internet accessibility could have been a limitation. I also did not use random sampling procedures for participant selection in this nonexperimental design; therefore, the scope of generalizability of the results is limited.

The use of logistic regression for statistical analysis also had inherent limitations on what might be inferred from the results given that mental health service use was a dichotomous variable. Participants' range of mental health service use could not be determined and limited my ability to capture statistical nuance related to frequency of mental health service use. There was also the possibility that an unforeseen independent variable could invalidate the predictive value of the statistical findings. Additionally, a logistic regression is intended to imply the predictive value of independent variables, but this can be difficult to assume given the difficulty in asserting that MHL influences

mental health service use when it might also be true that mental health service use influences MHL. Given that there is a paucity of research literature addressing any association between MHL and the mental health service use of foster parents, there was merit to the expected findings and justification for conducting the study.

Significance of the Study

A key benefit of this study was that it offered a discrete determination of the level of MHL for a population with little to no representation in scholarly literature. By knowing the MHL level of Florida foster parents, counselors can more appropriately engage in advocacy efforts to ensure that foster parents possess MHL and know when and how to utilize mental health services. Moreover, findings from this study may provide a basis for stakeholders to define the MHL of foster parents, clarify the role that age plays on MHLS scores, and ultimately lead to a better vantage point for stakeholders to monitor and craft policies and support for foster parents. These findings may also help stakeholders have greater confidence in evaluating strategies to improve the retention of foster parents, clarify training needs, and match foster parents with specific children. These efforts ultimately may help elevate MHL as a public health issue for communities and beyond.

Mental health service use is associated with positive outcomes (Chorpita et al., 2011). In turn, knowing whether MHL and the age of foster parents have an influence on their utilization of mental health services was important to determine. The study contributes to the ongoing discussion found in the literature about the theoretical nature of MHL and its application to specific populations like foster parents. By obtaining

assessment-driven data about foster parent MHL and then collecting data on their mental health service use, I also developed a better understanding if the conceptual framework of MHL as defined by Jorm was consistent with the results.

Summary

In Chapter 1, I provided an overview of the study by discussing the relevance of the study and background information related to Florida's child welfare system, explaining the problem statement and purpose of the study, and describing the theoretical framework for the study and how current literature does not clearly address the problem under study or the research question.

In Chapter 2, I will provide a comprehensive review of the literature. I will discuss in greater detail how MHL is understood theoretically in the literature and how it relates to foster parents and mental health service use. Additionally, the chapter will contain a discussion of the sociodemographic variables I measured in the study and provide justification for including one demographic variable (i.e., age) in the analysis. I will also explain why mental health service use is a priority and the reasons for focusing on this outcome variable. The goal of Chapter 2 was to systematically demonstrate a clear gap in the research literature regarding the mental health service use of foster parents and why MHL and age were worthy of being researched.

Chapter 2: Literature Review

In this study, I determined the extent to which foster parents utilize mental health services, their MHL level, and whether their MHL was a significant predictor of mental health services utilization after controlling for age. Research addressing the MHL of foster parents is scant. At present, the baseline MHL of Florida foster parents is unknown. Generally, low MHL has been shown to inhibit adequate use of mental health services (Hyland et al., 2015; Mendenhall, 2011; Mendenhall & Frauenholtz, 2015). Ample literature is available justifying the efficacy for using mental health services (Chorpita et al., 2011). Researchers have also demonstrated that children in foster care have been at high risk for poor, long-term mental and physical health outcomes (Fratto, 2016; Havlice et al., 2013; Jackson Foster et al., 2015; Sempik et al., 2008). Since MHL may be readily addressed by mental health professionals and could have an impact on both the experiences of children in foster care and foster parents, it was reasonable to explore how MHL relates to mental health service use among foster parents. The purpose of this quantitative study was to close this gap within the literature by determining the level of MHL among Florida foster parents and if MHL predicts mental health service use after controlling for age. In this chapter, I explain the literature review process, discuss MHL as a theoretical framework, and define key concepts fundamental to the study. I also describe what is known about the impact that age has on mental health service use and why it was used as a covariate of interest.

Literature Search Strategy

I obtained literature for this study through accessing the databases of EBSCO, ProQuest Central, PsycARTICLES, and SocINDEx; the Google Scholar search engine; and Walden University's Thoreau multidatabase search platform. Key terms used in the search were *mental health awareness, mental health literacy, foster parents, mental health service utilization, mental health services,* and *treatment-seeking.* Key terms were often combined to locate peer-reviewed articles.

In my literature review, I gave attention to the age of the sources, selecting articles with a targeted maximum age of 7 years when possible. I selected articles beyond this age range when they were from primary sources foundational to the study, offered evidence of a long-standing trend in the research literature, were the most relevant sources, or provided discrete insight about claims being made within the current study. Statistical information regarding foster care in Florida was also reviewed across online repositories and selected articles based on commonality with other online sources.

Conceptual Framework

A discrete theory offers clarity for research to be performed, providing outcomes that can be used to argue for the support, modification, or disassembly of that theory (Creswell, 2014). While there is a large body of research surrounding the construct of MHL, it is not understood as a formal theory (Spiker & Hammer, 2019). My review of the literature indicated that MHL was more of a conceptual framework and less like an established theory. Selection of a theory or theoretical framework is essential to the construction of a dissertation or any research project because it is the binding ideology

that cohesively holds all other aspects of a study together (Osanloo & Grant, 2016). The research problem, the purpose of a study, and the research questions are affected by selection of the theoretical framework (Osanloo & Grant, 2016). The framework used for the current study was Jorm's (1997) MHL construct. I opted to use the construct of MHL as bearing qualities akin to a formal theory. Spiker and Hammer (2019) articulated that MHL as it stands, is a construct, but should be developed further as a distinct theory. They explained that lack of solidarity in construct definition throughout the literature is an issue and that clear relationships between the associated factors embedded in the various definitions of MHL are not clearly articulated. While important, this debate was not determinative of how the current study materialized in its execution. For the purpose of this study, I referred to MHL as a conceptual framework given that consensus could not be found in the literature if I should refer to MHL as a theory. Within this section, I discuss what Jorm's MHL framework is, the assumptions of Jorm's framework of MHL, how the construct of MHL has been used in other studies, and why the construct was relevant to the current study.

Jorm's MHL Framework

Jorm's MHL framework is an extension of health literacy. Health literacy refers to one's ability to exercise insight and make sound judgment on how to address a physical health problem (Health Resources and Services Administration, 2019). A commonly accepted belief is that the public can better manage their physical health when they understand how to prevent, responsibly intervene at an individual level, and locate formal treatment supports in their community (Jorm, 2012). For instance, the prevalence

of public health initiatives that target healthy dieting; sexual health; smoking; and more recently, the Coronavirus Disease 2019, all support the belief that the public is more prepared to handle a health problem when they are provided the tools necessary to enable their ability to act. MHL generally lacks the same support as health literacy does among the public (Jorm, 2012). People often lack knowledge about prevention and treatment of mental health problems and are often uncertain how to help those around them that lack mental wellness (Jorm, 2012).

Assumptions of a MHL Conceptual Framework

In the MHL framework, Jorm (2000) encouraged a preventative stance on mental wellness. Jorm's approach to MHL included several key components:

> (a) Knowledge of how to prevent mental disorders, (b) recognition of when a disorder is developing, (c) knowledge of help-seeking options and treatments available, (d) knowledge of effective self-help strategies for milder problems, and (e) first aid skills to support others who are developing a mental disorder or are in a mental health crisis. (p. 231)

These five components define MHL. As a conceptual framework, MHL differs from other constructs found in the literature, capturing a broad perspective on the treatment of mental health problems. Conceptualizing mental health problems as being "treatable" before they occur underscores the forward-thinking approach of a MHL framework. Not only is there a strong emphasis on preventative action taken but also a working knowledge on how to mindfully respond to mental health problems as they present. A central aspect of this approach is responsibility for wellness. Individuals and

communities are seen as complementary factors for accomplishing more mentally-well societies. Jorm's (2019) conceptual framework addresses the value of intervention by mental health professionals but also the role that laypeople have in promoting wellness for those in their communities that are impacted by a mental health problem. Jorm's approach conceptualizes the amelioration of mental health problems mostly through prevention efforts. Education, training, symptom recognition, self-care, and general intervention strategies align with the view that mental health in communities can be improved through responsible, proactive actions by their members.

MHL Conceptual Framework in Other Studies

Since its conception, a growing body of research has developed surrounding MHL and its applicability across populations. In prior studies, a survey approach has been used to collect data from communities with similar outcomes internationally, namely that MHL levels are low across the populations (Coles & Coleman, 2010; Jorm, 2012; Olsson & Kennedy, 2010; Wu et al., 2017). Consistent with prior research designs used to evaluate MHL, I used a survey design in the current study to determine if MHL among foster parents follows similar trends found in other research focused on different populations.

A review of the state of MHL among caregivers was of principal importance in the current study since I sought to assess the MHL of foster parents. In a systematic review of the literature, Hurley et al. (2020) found that MHL among parents and caregivers was low. Furthermore, Jorm (2012) discussed how the symptom recognition, a basic element of MHL as a framework, of both parents and children influenced outcomes

for the mental wellness of children affected by a mental health disorder. For instance, researchers have found an association between parental ability to recognize symptoms correctly and an increasing age of adolescent children (Wright & Jorm, 2009; Wright et al., 2007).

There is not scholarly consensus about whether MHL should be called a theory (Spiker & Hammer, 2019). However, the theoretical components of MHL as a conceptual framework are found throughout the literature in various studies and have resulted in strong evidence supporting the conceptual notions of MHL originally articulated by Jorm (2000). Since Jorm's explanation of the conceptual framework of MHL, a growing body of research continues to support the basic premises put forth that theoretically drove the current study.

Relevance of the MHL Conceptual Framework in the Current Study

I sought to offer an explanation about the state of MHL among Florida foster parents through this study. As a theoretical lens, MHL offers insight into how the child welfare system might be improved upon. A focal point of this study was to examine how the MHL of foster parents intersects with their mental health service utilization.

A supposition found within a MHL framework is that as individuals have greater knowledge about how to manage and prevent illnesses, they tend to develop more resilient, healthy communities. In the framework, it is posited that as mental health challenges arise, individuals affected, as well as those around them, know how to respond and mitigate their negative impact on the affected individual and community (Jorm, 2012). Prior research supports this position and indicated that low levels of MHL have

resulted in both delayed treatment and an altogether denial of treatment (Hyland et al., 2015; Mendenhall, 2011; Mendenhall & Frauenholtz, 2015). As parents and caregivers naturally have privileged power over the health care of their children, their need to demonstrate the ability to recognize, prevent, and respond to mental health challenges is important for family wellness and broader society. Research findings have shown that parents with greater knowledge of mental disorders more efficiently utilized mental health services for their children (Mendenhall, 2011). While this finding does not speak to the service use of parents, it does show the need to understand the MHL of caregivers given their influence over the health of children. Moreover, these findings result in questions about the extent to which parents with advanced MHL are better able to manage their own mental health.

Foster parents were the targeted population of this study. It is arguable that foster parents may have the most important job in the child welfare system. Foster parents are frontline caregivers to youth who have experienced severe family disruption and are also responsible for navigating an often-complex child welfare system. A review of the literature revealed no studies that addressed MHL among foster parents in the way that I do in the current study. This was surprising given their vital role within the child welfare system and the influence they have over the mental wellness of foster youth. Not understanding the MHL of foster parents impedes the possibility for knowing the implications for self-care, retention of foster homes, appropriateness of care of foster youth, and the strategic recruitment and training of foster parents.

In this study, I analyzed whether MHL predicts foster parent mental health services utilization after controlling for age. The MHL conceptual framework provided a mechanism to understand how enhancing MHL levels might result in a healthier, sustainable child welfare system. This conceptual framework is multifaceted and has broad sociopolitical implications that might affect the lives of foster parents and foster youth but also how stakeholders broadly approach promoting health literacy within the child welfare system at large.

Literature Review Related to Key Variables and Concepts

In this literature review, I address MHL as a theoretical concept, the relationship of MHL to foster parents, the relationship between MHL and mental health service use, and the influence of age on mental health service use. Florida foster parents were the target population for this study.

My exhaustive review of available research databases revealed that foster parents and MHL were unassociated terms to be found. The mental health service utilization of foster parents was also a topic not clarified in research literature. The MHL of foster parents represented the predictor variable with age being a covariate. Mental health service utilization was the outcome variable.

MHL: An Extension of Health Literacy

Jorm (2000) developed the concept of MHL, expressing the concern that mental wellness lacks the same valuation as other aspects of health care and is not thoroughly included in conversation surrounding “health literacy.” The term health literacy emerged in the 1970s and has since influenced public health policy and public education

surrounding health care and preventative health measures (Batterham et al., 2016; Simonds, 1974). Health literacy specifically refers to the beliefs, motivation, and help-seeking strategies used by individuals and their communities to promote healthy lifestyle changes (Nutbeam, 2008). Clear emphasis exists on investment by communities to manage and improve health (Nutbeam, 2000). The result of attention being given to health literacy has improved clinical service delivery, community involvement in efforts toward improved health, health service planning, public health education, and policy development (Apfel & Tsouros, 2013). These are encouraging outcomes; however, considering these positive outcomes, mental health has not been fully realized as a health literacy concept. It is a plausible assumption that for similar outcomes in mental health to occur, then mental health must be emphasized as a public health issue. Jorm's (2015) call in 1997 for inclusion of a MHL concept spurred the belief that unless coordinated efforts to improve MHL among populations happen, promising outcomes for a society's mental wellness are less likely. Jorm's introduction of MHL also targeted an important deficiency found within the field of mental health. While health literacy overlooked mental health as being inextricably connected, literature regarding mental health demonstrated no clear connection to health literacy (Jorm, 2000). The concept of MHL is a bridge idea showing that physical well-being and mental wellness are not mutually exclusive realities.

MHL Defined

MHL is a multifaceted approach that offers a comprehensive view of individual and community responsibility in preventing and appropriately reacting to mental health

needs (Jorm, 2012). A clear definition of MHL, which was fundamental to the research questions and aim of this study, was provided by Jorm (2012):

> (a) Knowledge of how to prevent mental disorders, (b) recognition of when a disorder is developing, (c) knowledge of help-seeking options and treatments available, (d) knowledge of effective self-help strategies for milder problems, and (e) first aid skills to support others who are developing a mental disorder or are in a mental health crisis. (p. 231)

Understanding MHL properly, as intended by Jorm, was foundational for the current study because MHL was a measured construct in the study. Moreover, the sociopolitical and clinical implications of this study are directly tied to how MHL is defined as a concept. In Jorm's view, responsibility for mental wellness is shared by the individual, family, and community placing an onus upon power structures to enhance the insight and actionable knowledge that every community member needs to helpfully handle its own collective mental wellness.

MHL Among the General Population

The specific focus of this study was Florida foster parents, but taking a broad view of the state of MHL among the general population may be helpful to better appreciate foster parent MHL. A review of the research revealed that culture influences how MHL functions. Jorm (2012) identified that accurate identification of mental disorders is common across many people across countries. Culture seems to be a controlling factor over what types of disorders are most recognizable to a population, but generally, mental disorders tend to be misidentified by the public (Furnham & Hamid,

2014; Jorm, 2012). When they are identified, a common problem is the tendency for terminology to be used that normalizes and inevitably works against movement toward seeking professional support (Jorm, 2012).

Several studies within the United States also seem to provide evidence that an overall lack of MHL persists. Early intervention of mental health problems is important in accomplishing positive outcomes, especially with anxiety disorders (Schotanus-Dijkstra et al., 2017). Cole and Coleman (2010) found that well-educated young adults from the United States were able to recognize symptoms of obsessive-compulsive disorder and social phobia at about 80%, but less than half for other anxiety-related conditions, including generalized anxiety disorder. Symptom recognition was also shown to be linked to help-seeking attitudes (Coles & Coleman, 2010). These findings highlight how a prevailing mental health problem in the United States is misunderstood by a population that might be expected to have greater proficiency and insight into how to identify and ameliorate anxiety-related problems. Moreover, numerous studies consistently demonstrated that the general public perceives people affected by mental illness as being a threat to others' well-being (Link et al., 1999; Martin et al., 2000; Perry et al., 2007; Pescosolido, Fettes, et al., 2007; Pescosolido, Perry, et al., 2007). Interestingly, age did not limit this belief as children with depression or attention deficit hyperactivity disorder (ADHD) were also seen as more dangerous than their peers (Pescosolido, Fettes, et al., 2007). The findings from these articles indicated that to some degree there was MHL, but not enough to accurately assess depression and ADHD influences risk towards harming others. Approximately 6.1 million U.S. children have

had a diagnosis of ADHD (Danielson et al., 2018) and 1.9 million children have had a depression diagnosis (Ghandour, 2019). Given these high figures coupled with the public's lack of understanding of these conditions there is a need to enhance MHL within U.S. society. Without a change in awareness and insight into the nature of mental health symptoms unhelpful attitudes toward those that are affected by mental health problems will likely replicate themselves, leaving individuals as well as communities to experience unintended personal and communal consequences.

MHL of Parents and Caregivers

Within the United States, there is also a clear absence of research addressing MHL among specific populations (Coles & Coleman, 2010; Olsson & Kennedy, 2010; Stansbury et al., 2013; Valdivieso, 2017). Lack of mental health service use persists internationally among children and families affected by mental illness (Green et al., 2013). Lack of service use is quite concerning considering the primary role that parents and caregivers have in children's lives. Research literature seems to indicate that diminished MHL of parents and caregivers may influence symptom recognition, awareness of treatment options, and judgment about when to seek out professional help. Hurley et al.'s (2020) systematic review of the literature on family and caregiver MHL revealed that caregiver generally had a functional ability to recognize mental health symptoms, but that gaps resulted in how their knowledge translated into utilization of services. Caregivers also generally believed in and were willing to support the acquisition of services but foster parents by contrast did not transform this belief to actual utilization of services. Hurley et al.'s systematic review of 21 studies revealed a clear absence of

research emerging from the United States that focuses on MHL among caregivers and how this might relate to help-seeking behavior. A clear picture of the level of MHL among parents and caregivers in the United States is difficult to ascertain given the current lack of available research exclusively describing American caregivers.

MHL of Foster Parents

Foster parents are a population with little demonstrable research exploring their MHL and clarifying its effects. Bonfield et al. (2010) examined MHL of foster parents as it relates to the advocating for foster children receiving mental health services. Mosuro et al. (2014) tested efficacy of an intervention designed to enhance mental health awareness of foster parents as it relates to the care of foster children. While these studies address MHL and foster parents they do not do so from the angle of addressing MHL of foster parents and how this relates to the wellness of foster parents themselves. Clearly, vulnerable children need access to mental health services, but likewise, foster parents also require attention from the mental health community. Considering the frontline position that foster parents hold for the advocacy of children entering their care and the long-lasting, negative mental health outcomes that correlate with youth being in foster care, it is essential to address the mental wellness of foster parents (Blythe et al., 2013; Fratto, 2016; Jackson Foster et al., 2015; Sempik et al., 2008). A gap in the literature is that there is an unclear knowledge base about what the MHL of foster parents is and with great specificity how foster parents' degree of MHL relates to outcomes for themselves or children in their care. Aspects of MHL have been given attention in the literature regarding foster parents, but I was unable to find any support in the literature where

research had been performed that addressed MHL as a concept or was consistent with all that the definition encompasses.

Jorm's (2000) framework of MHL has a preventative emphasis by addressing mental health education, symptom recognition, and a working knowledge of resources for treatment *before* an instance of need. Jorm's framework for MHL implies a capacity to nurture mental wellness broadly. Rodger et al. (2006) found that foster parents identified that handling difficult behavior of foster children was significant enough to contribute to thinking about halting commitments to provide foster care. Randle et al. (2017) argued that caregiver education, a preventative intervention, might lead to a more positive experience for foster parents and improve retention. Retention was not the focus of this study, but it is important to consider if difficulty managing children's behavior and training deficits may negatively affect foster parents' willingness to continue foster care. The report of foster parents themselves in research by Randle et al. was that they felt ill-prepared for behavioral needs of children and their own emotional experiences related to foster care. Findings from Randle et al.'s research reflects a need for preventive interventions to build capacity for mental wellness as a caregiver, but also strengthen feelings of support and connection to formal supports (i.e., foster agencies) which are both ideas embedded in Jorm's MHL framework. A broad base of literature giving attention to mental health outcomes of youth exists, but current research addressing the mental wellness of foster parents in the United States is absent. Findings from this study helped fill this gap by offering a metric on the MHL of foster parents residing in the United States.

Self-care strategies are a component of the concept of MHL that addresses appropriateness of response to a mental health problem (Jorm, 2000). Researchers have studied the effects of stress-level and emotional distress of foster parents. For example, research by Marcellus (2010) indicated that stress-level and unrealistic expectations of foster parents may contribute to their choice to disengage from fostering altogether. Foster care brings with it a reality of stress and disappointment. There is a possibility of lessening the power of these negative experiences that influence foster home retention by enhancing a foster parent's knowledge about how to personally apply strategies that encourage emotional wellness and identify when to seek support from a professional. While these studies are helpful, they only address self-help strategies which is only one facet found within Jorm's conceptual framework of MHL.

Within the United States and abroad, foster children tend to have poorer outcomes in their mental and physical health compared to children not in foster care. Ford et. al (2017) reported British children in government-sanctioned care versus private care had greater odds of having a psychiatric diagnosis (*OR* = 4.92). Meltzer et al. (2003) also reported a prevalence of 45% of children in government-sanctioned care having a mental health diagnosis among a sample of 1,039 participants. In research comparing U.S. foster children with other traditional indicators of poor outcomes for mental and physical health, Turney and Wildeman (2016) consistently found foster children were at higher odds for emotional, physical, or learning problems compared to children not in foster care, but having risk factors (i.e., living in poverty, single parent homes, unemployed parents, living in unsafe neighborhoods, or having insurance). This has led to a focus on

the impact that foster parents have on the mental health of foster youth, but conversely, not on how the experience of fostering impacts foster parent mental health. Research on facets of MHL as defined by Jorm (2000) are found in the literature, but I located no study that measured the MHL of foster parents. This is concerning given the impact that diminished MHL might have on the personal wellness of foster parents, retention of foster homes, and iatrogenic harm to foster youth by foster parents lacking competence.

Foster parents are underrepresented in the literature with many questions unanswered about their relationship with MHL and its related outcomes. Research has addressed various aspects of MHL, but neither U.S. research nor international studies have singularly addressed the concept of MHL as a capacity to be measured with associated outcomes, specifically service utilization. For example, Mosuro et al. (2014) examined an intervention among British foster parents to increase mental health awareness, one aspect of MHL, but not the concept as a multifaceted capacity. Moreover, Rodger et al. (2006) determined among Canadian foster parents through survey response that challenging aspects of foster care were identified as frustration with agency policy, coping with difficult child behavior, and conflict with agency personnel and relating to greater association with deciding to quit fostering (r = .76, .75, and .74). Randle et al. (2017) identified the impact that emotional distress and problems managing child behavior had on foster parents' experiences. Dimensions of the concept of MHL can be found in research articles like that of Mosuro et al., Rodger et al., and Randle et al. However, research that takes the conceptual totality of MHL as Jorm defined it is not present. In this study I specifically addressed MHL among foster parents in Florida as a

complete concept as defined by Jorm to determine if there was any relationship with mental health service use.

Florida Foster Parents: A Case for MHL

Florida foster parents are the population of interest for this study. Florida ranked third among states for the highest number of children in foster care in 2021 (U.S. Department of Health and Human Services, 2022). Of the 441,190 children in foster care across the nation, accounted for 37,230 or 5.89% of all foster children nationally (U.S. Department of Health and Human Services, 2022). The rate of children in foster care in Florida in 2017 was 5.9 per 1,000 children compared to a national rate of 5.8 per 1,000 (Williams, 2022). Regarding MHL there is an absence of attention given in the research literature to foster parents. Understanding foster parent MHL is important considering that foster parents are sanctioned caregivers entrusted with many dimensions of care for vulnerable children. Foster parents spend a great deal of time with children in their care, and so, are highly likely to encounter emotional or behavioral health needs that a foster child may have. Indeed, Randle et al. (2017) examined factors leading to consideration of dropping out of fostering which resulted in feedback from foster parents stating that difficulty coping with emotional distress related to fostering was a neglected capacity by child welfare stakeholders. Given the high number of children in foster care in Florida, it is imperative to better understand the MHL of foster parents and if there are any meaningful associated outcomes.

The Usefulness of Mental Health Services

Chorpita et al. (2011) found a positive relationship between mental health outcomes and the use of mental health services in the treatment of anxiety disorders (r = 0.85). Mental health services of many different types are helpful across cultures, populations, and age groups (Degnan et al, 2019; McAleavey et al., 2019; Munder et al, 2019; Schleider & Weisz, 2017; Soto et al., 2018; Turrini et al, 2019). For instance, in an international study of Iranian parents a group counseling intervention strengthened parental self-efficacy and awareness about how they might properly respond to child victims of sexual abuse (Navaei et al., 2018). Parents completing the service had sustained attitude changes immediately following the intervention and at a 1-month mark (Navaei et al., 2018). In additional research, Sadehian et al. (2020) reduced mental health stigma of family and caregivers through a group counseling intervention (t = 8.94, p < .001). Considering the large body of research that has persisted over many years showing the efficacy of treatment mental health service utilization was analyzed as an outcome variable in the study (Barth et al., 2016; Linardon et al., 2017; Spijkerman et al., 2016).

Mental Health Services Utilization and MHL

Exploring current literature relative to MHL and mental health service utilization is needed when specifically focusing on a specialized group like foster parents. Research by Andrade et al. (2013) revealed in a multinational study across 121,899 participants that 96.3% of respondents that identified a need for treatment but did not engage in any services also possessed at minimum one restrictive attitude about seeking help. Furthermore, Li et al. (2016) found in their systematic review of literature related to

young adults that service use was strongly predicted by perceived need (*OR* = 4.89). In addition, Bonabi et al. (2016) found that if at baseline MHL, perception of need, and attitude towards services were higher among participants, then they adhered to counseling interventions as well as pharmacologic intervention longer than those with lower baseline levels. Evaluating these articles reveals the impact that attitude toward mental health service use seems to have across populations on using mental health services.

A look at the literature demonstrates that key demographic variables influence the acquisition of mental health services. Consistent results support the notion that identifying as female relates to more positive perception of the use of mental health services (Gonzalez et al., 2005; Rüsch et al., 2014). Li et al. (2016) found that across longitudinal, cohort, and cross-sectional designs being female over male predisposed service use, respectively (*OR* = 1.71, 1.48, and 1.45). Mackenzie et al. (2006) observed women to have more positive beliefs about mental health services than men (*b* = 0.09, *SEb* = 0.04). Research also indicated that racial minorities compared to Whites has a negative impact on service seeking behavior (Kim & Zane, 2015; Masuda et al., 2009). Moreover, age impacts mental health use. In 2019 in the United States mental health service users with greatest percentage of use by age were between 45 and 64 (Terlizzi & Zablotsky, 2020). Steel et al. (2007) reported that for each level of education gained an increased likelihood of seeing a psychiatrist, family doctor, psychologist, or social work resulted (15%, 12%, and 16%, respectively). Gender, age, race, location, religious orientation, sexual orientation, economic class, and education level were analyzed see if notable trends persisted among foster parents.

Caregivers and Barriers to Mental Health Service Use

MHL is a broad concept that includes the capacity for the members of a support system of someone with a mental health problem to advocate for appropriate services (Jorm, 2000). Thus, the initiation of parents or caregivers into mental health services is an aspect of their own level of MHL. Foster children are especially at risk of lifelong negative social, emotional, and physical problems (Fratto, 2016; Jackson Foster et al., 2015; Sempik et al., 2008). There is little research available to show what behavioral trends persist among foster parents regarding mental health service use. Research by Villagrana and Palinkas (2012) did not discretely address how foster parents might use mental health services, but the researchers did discover insightful findings about the beliefs surrounding mental health services that foster parents held. Villagrana and Palinkas found that across 430 birth parents, foster parents, and relative caregiver dyads, all had compromising beliefs about the helpfulness of services, and foster parents tended to view services as lacking effectiveness. These results are not indicative of the likelihood of how foster parents may use services for themselves, but it did highlight an important disconnect between foster parents' awareness of mental health needs and attitudes found consistent in the literature that contribute to low level of service acquisition (Villagrana & Palinkas, 2012).

Mental wellness among parents and caregivers in general affects readiness to use mental health services (Ackerson, 2003; Liu et al., 2016). National research indicated that education, income, and race of a parent or caregiver all relate to their mental health status, and that if categorized as having poor mental health, they experienced greater

parenting stress, insufficient emotional support, and application of coping skills (Ackerson, 2003; Liu et al., 2016). Furthermore, Liu et al. (2016) determined that compared to birth or stepmothers and fathers, guardians reported higher self-report of parental stress as caregivers. Guardians represented in Liu et al.'s study serve as a comparative relationship for how foster parents report given that both guardians mentioned in the study and foster parents do not represent natural parental roles (i.e., biological mother/father, stepfather/mother).

The impact that age has upon attitudes toward mental health and mental health service utilization is unclear. For instance, Green et al. (2020) found that among minority members younger than 60 were less inclined to use mental health services. Bradbury (2020) found that adults over the age of 40 demonstrated less stigmatic attitudes for mental health diagnoses than younger age brackets. However, research by Gonzalez et al. (2011) determined, using, a study of 5,691 adult, that 18–34-year-olds were more comfortable with mental health service use and actual service used when compared to 50–64-year-olds. The unclear nature of the research surrounding age and its impact on mental health service use as well as attitudes about mental health altogether calls attention for this study to address. Even more unclear is how age relates to no present study addressing this.

While clarity about service use of foster parents is unclear, there is suggestion in the literature that mental health service use while in a parental role is influenced by one's own mental health as well as other sociodemographic characteristics. These factors influence how caregivers experience parenting and can manage their role with efficiency.

This study helped close a gap in the literature by showing how mental health service use related to other variables associated with foster parents.

MHLS Questionnaire

The MHLS questionnaire was used to assess the level of MHL among Florida foster parents. The MHLS is a scale-based assessment that is specific to the complete concept of MHL (O'Connor & Casey, 2015). MHL has been assessed through a variety of different strategies including vignettes and clinical interviews, but the MHLS has greater utility than these methods given its ease of administration, psychometric rigor, dedication to the conceptual definition of MHL, and structure as a scale-based tool (O'Connor & Casey, 2015). Use of the MHLS has been demonstrated across cultural contexts and international lines. Joonas Koorhonen et al. (2022) reported utility of the MHLS with primary health care workers in Zambia and South Africa. In addition, Montagni and González Caballero (2022) demonstrated valid and reliable use of the MHLS with French university students.

Foster parents in general have not received attention within the literature in terms of assessment of their MHL. However, using the MHLS to assess foster parents in the United States, specifically northwest Florida, was completed with confidence given the prior precedent for international use found in the scholarly literature. Only one article addressing the assessment of MHL of foster parents could be found and used a sample from the United Kingdom, but relied upon various scales and clinical interview vignettes in order to address all domains that the concept of MHL encompasses (Bonfield et al.,

2010). This study was different in that a singular assessment, the MHLS was used to generate an overall score of MHL of foster parents in the United States.

Summary and Conclusions

MHL is a concept developed by Jorm (2000) as being essential for calling widespread attention to the recognition, maintenance of care, and prevention of mental health problems. This study addressed several key gaps in the literature. MHL is a concept clearly found in the research literature, but discussion about how the concept applies to foster parents is absent. A strong body of literature demonstrating the overall efficacy of mental health services exists (Beutler, 2009; Beutleret al., 2003; Chorpita et al., 2011; Lambert & Ogles, 2004; McMain & Pos, 2007; Shedler, 2010; Thomas & Zimmer-Gembeck, 2007; Verheul & Herbrink, 2007; Wampold, 2001). Examining how MHL of foster parents related to use mental health services offered insight into the current condition of Florida's foster parents and provided an empirical basis for discussion where there currently is none. Addressing these gaps in the literature was important considering that mental health services are generally associated with positive mental health outcomes (Chorpita et al., 2011). Addressing this gap in the literature will lead to a more complete view of the status of MHL among foster parents and may serve as a guide for more research focused on foster parents. Within the next Chapter, I will discuss in detail the research design, methodology, data analysis plan, as well as validity and ethics considerations of my study.

Chapter 3: Research Method

In this quantitative, nonexperimental study, I gathered data about participant MHL via the MHLS and participant demographic data and mental health service utilization via a questionnaire using a cross-sectional, survey design. The purpose of this study was to examine the strength of the relationship between MHLS score and mental health service utilization.

In this chapter, I describe the research design of the study and offer justification for its selection. I also explain the methodology used in the study in enough detail to ensure that it might be replicable. The chapter also includes a discussion of threats to the validity of the study and ethical concerns that were accounted for.

Research Design and Rationale

In this study, I examined the relationship of the MHL of foster parents and mental health service use after controlling for age. MHL was the primary independent variable, while mental health service use was the dependent variable in the study. I included age in the main analysis and collected other demographic variables to describe the sample, including the participants' age, gender, location, race, sexual orientation, religious orientation, economic class, and level of education.

No known database of information could be used to obtain the data necessary to address the research question of the study; therefore, soliciting survey responses from foster parents at a single point in time was deemed appropriate. One objective of this study was to more generally describe characteristics of the broader population of foster parents, which is consistent with using a survey design (see Babbie, 1990). Moreover,

given that this was a dissertation project, I had limited time and resources available for the completion of this study, so an electronic survey format occurring at one time was reasonable as the data collection method.

I reviewed the literature addressing how MHL might relate to mental health service utilization of foster parents and my search revealed no studies on this specific topic. Therefore, the results of this study helped fill a gap in the literature and contribute to scholarly discussion about this topic and its relevance to the counseling profession.

Methodology

Population

The target population for this study were foster parents in Florida. Sampling for my study involved foster parents from the 14th and second judicial circuits of Florida. All participants were under the supervision of a regional foster licensing agency and the Florida Department of Children and Families. The participant response rate did not affect create a need to extend the parameters of my survey to areas of Florida beyond those originally targeted.

Sampling and Sampling Procedures

Participants for this study were foster parents that held an active foster care license. Participants were sampled from the 14th and second judicial circuits of Florida, which included the following counties: Bay, Gulf, Calhoun, Jackson, Holmes, Washington, Franklin, Gadsden, Jefferson, Leon, Liberty, and Wakulla. I selected this region of Florida for several reasons. For the years of 2017 through 2019, Bay County alone had the 10th highest rate of children in foster care compared to the other 26 counties

in Florida (Florida Department of Health, n.d.). Moreover, it was unclear how foster parent licenses are managed throughout Florida. Independent agencies contracting with the state and then with subcontracting agencies seemed to be the vehicle by which licensing foster parents is accomplished. Needed relational connections with stakeholders was important to access foster parents efficiently because there is no clear formal mechanism that I was aware of to access foster parents directly (e.g., a state database).

I purposively sampled foster parents that were licensed in Circuits 14 or 2. This excluded nonrelative caregivers caring for a nonbiological child unless they were licensed as foster parents. A regional foster licensing agency service both identified Circuits was responsible for licensing foster parents that I targeted in the study.

I analyzed two outcome groups with one group using mental health services and the other not using mental health services. A minimum sample size of 40 participants was needed, but 42 participants were recruited. Sample size was derived using the "Rule of Ten" approach. Peduzzi et al. (1996) demonstrated that with a logistic regression, statistical power was accomplished when a minimum of 10 events per predictive variable occurred. Vittinghoff and McCulloch (2007) suggested that 10 events per variable may be too conservative and that in some scenarios this threshold may even be lowered. For the purposes of this study, 10 events per variable was maintained, which translated to a minimum sample size of 40 participants because there were two predictor variables (i.e., MHLS and age). The smallest outcome group (i.e., used/did not use mental health services) required at least 20 events.

Procedures for Recruitment, Participation, and Data Collection

To recruit participants for this study, I collaborated a regional foster support division that was responsible for monitoring the license status of foster parents, supporting foster parents, and maintaining annual training requirements. The regional foster division maintains a contact list for all licensed foster parents. I accessed foster parents by having the research survey sent to foster parents on this list.

I did not offer an incentive for participation in this study. A sufficient number of participants responded for statistical analysis to be performed. Informed consent for the study was accomplished by an initial agreement page in the electronic survey that explained the purpose of the study, relevance of the survey to findings, and confidentiality of survey responses. The acquisition of demographic information was important for this study because of the absence of available research describing the population of foster parents. I collected data on the participants' age, gender, sexual orientation, religious orientation, race, economic status, and level of education. Clarification about the need for collecting this information was included in the agreement page of the survey. I commented that no discomfort or stress comparative to routine daily life was likely to be experienced as a result of participation. Participants were notified that the survey would take approximately 10 minutes to complete. At the end of the survey, respondents had the opportunity to opt out of submitting their responses, agree to receiving access to the findings of the study, and be provided with a list of area providers if they were interested in seeking mental health services.

Instrumentation and Operationalization of Constructs

In this subsection, I discuss the survey instrument used to collect data from participants and outline my rationale for its use. I also provide psychometrics of the instrument and operationally define the constructs being measured. The procedures for obtaining the rights to use the survey are described as well. The construct of MHL was the predictor variable within this study. Age was a covariate under analysis, and the construct of mental health service utilization was the outcome variable.

I measured the predictor variable of MHL using the MHLS developed by O'Connor and Casey (2015). I obtained written permission from the authors for its use prior to data collection. The MHLS was designed to discretely measure the construct of MHL as defined by Jorm (2000) using a scale. The MHLS was appropriate for the current study given that it is methodologically robust and able to be administered in a time-efficient manner (see O'Connor & Casey, 2015). The MHLS offers the ability to identify a range of MHL in individuals and discover their attitudes toward mental health and seeking support (O'Conner & Casey, 2015). This aligned with the aim of the current study, which was to describe the relationship between foster parents' MHL and their use of mental health services.

The MHLS is a 35-item questionnaire on which respondents rate their level of agreement with both 4- and 5-point Likert scales (O'Connor & Casey, 2015). The MHLS is robust in terms of reliability and validity. Reliability measures resulted in a Cronbach's alpha of .873 and test-retest measures resulting in $r = .797$ with $p < .001$ (O'Connor & Casey, 2015). Validity measures are also strong for the MHLS. Construct validity was

established with the MHLS and the General Help Seeking Questionnaire being positively correlated with the total score being $r(370) = .234$ and $p < .001$ (O'Connor & Casey, 2015). Structural validity of the MHLS has been established through comparison of means across groups with expected differences in MHLS scores (O'Connor & Casey, 2015). Mental health professionals scored higher than a community sample, and individuals with a mental illness or those having participated in services scored significantly higher than those that had not (O'Connor & Casey, 2015). The MHLS was the first scale-based instrument for measuring MHLS, so no baseline standard existed to accomplish criterion validity (O'Connor & Casey, 2015). In terms of rigor and practicality, the MHLS was appropriate for this study.

Scoring of the MHLS was straightforward. The following six facets of MHL are addressed on the MHLS: symptom recognition, knowledge of how to access information, knowledge of risks and causes of mental health problems, knowledge of self-help strategies, knowledge of available professional help, and attitudes related to seeking help (O'Connor & Casey, 2015). Some facets measured have more test items associated with them to adequately measure the attribute of MHL that is being targeted (O'Connor & Casey, 2015).

Data Analysis Plan

In this study, I assessed the strength of the relationship between the MHL of foster parents with their degree of use of mental health services. A logistic regression was used to determine if foster parents' level of MHL predicts their mental health service use. Mental health service use was defined as a dichotomous variable in this study. Variability

of the dependent variable by the independent variables was determined through Nagelkerke's R^2. The Wald coefficient is used to assess individual predictor estimates, and Exp (B) is used to determine predictive probabilities of change in the outcome variable (Peng & So, 2002). For this study, use of logistic regression analysis offered flexibility given the nature of the research question. I analyzed the collected data using computer technology, specifically the Statistical Package for the Social Sciences by International Business Machines. The following research question and hypotheses guided this study:

RQ: Does the MHL, as measured by the MHLS, of Florida foster parents predict their mental health service utilization after controlling for age?

H_0: The MHLS scores of foster parents do not predict service utilization after controlling for age.

H_1: The MHLS scores of foster parents predict service utilization after controlling age.

I collected demographic information, including gender, age, locale, race, education level, religious affiliation, sexual orientation, and economic class. Some research literature suggested that age is associated with increased mental health service use and enhanced attitudes toward help seeking (Bradbury, 2020; Green et al., 2020). Alternatively, Gonzalez et al. (2011) demonstrated more favorable outcomes among adults below the age of 34. Given this lack of clarity in the literature, I analyzed age as a covariate.

Threats to Validity

Threats to the external validity of the findings were the inability to confidently generalize findings because of the sampling procedures necessary for gaining participants; consequently, my claims about my research findings must be restricted (see Creswell, 2009). Volunteer bias was also possible in the current study given that foster parents represented a very distinct population that may possess qualities that I was not aware of that could have affected their manner of response to test items. Possible threats to the internal validity of the study included mortality because some participants exited the online survey prematurely (see Creswell, 2009). Their results were not included in data analysis as a result. Additionally, personal bias may have been possible given my own experiences and beliefs about what results would be yielded by completing this study. However, data analyzed was quantitative in nature yielding results with little room for interpretation. Additionally, all data analysis and reporting of findings was overseen by a senior researcher, my dissertation chair.

Ethical Procedures

This study required data collection from human subjects. I received approval from the Walden University Institutional Review Board (IRB) before any data were collected and provided. The approval number from IRB for my study was 08-22-22-0550738. To access participants, I contacted the regional foster support division and followed agency protocols regarding the access of foster parents. Though there was low risk of harm, I took measures to minimize risk of harm to participants. The survey was completed online and required all participants to acknowledge the intent of the research study and the

anonymity and confidentiality of survey results as well as offered them the ability to withdraw participation at any point.

I used a nonprobability sampling strategy because determining the exact population of foster parents was feasible. Thus, there was chance of omitting some foster parents from the study because they were outside my scope of reasonable access. The ongoing monitoring and consultation of someone removed from data collection was employed to help combat potential problems from the limits of the sampling strategy. Any personally identifying data will be destroyed 6 months after the study is published, and participants have had the opportunity to review the study findings.

Summary

The purpose of this quantitative, cross-sectional study was to determine the strength of the relationship between MHLS scores and mental health service use among foster parents in the panhandle area of Florida. A logistic regression was used for statistical analyses. In addition to participants' MHLS scores, I analyzed demographic variables to determine their relationship with mental health service use.

In this chapter, I discussed the research design and how it aligned with the research question. The methodological practices were also described so that the study might be replicated. Moreover, I provided the data analysis plan that clarified what the operational definitions were and the statistical procedures implemented. The validity concerns and ethical procedures relevant to the study were also discussed with transparency.

Chapter 4: Results

The purpose of this quantitative study was to determine if a statistically significant relationship exists between MHLS scores and mental health service use by foster parents. I hypothesized that statistically significant findings would reveal that the level of MHL and use of mental health services would positively correlate. Through electronic invitation, I asked participants to complete an online survey that first collected demographic information, including age, gender, locale, race, education level, religious affiliation, sexual orientation, and economic class, before if they had ever used mental health services and measured their level of MHL using the MHLS.

The following research question guided this study:

RQ: Does the MHL, as measured by the MHLS, of Florida foster parents predict their mental health service utilization after controlling for age?

H_0: The MHLS scores of foster parents do not predict service utilization after controlling for age.

H_1: The MHLS scores of foster parents predict service utilization after controlling for age.

In Chapter 4, I discuss the specific process of collecting data, measures taken to conduct statistical analysis, and findings that were obtained through data analysis.

Data Collection

Data collection was a multitier process that began with approval from Walden University IRB. After obtaining IRB approval, I constructed my survey using SurveyMonkey, a web-based platform for survey creation and dissemination. Neither the

informed consent and agreement pages as submitted to IRB prior to survey dissemination nor the actual data-producing questions (i.e., demographic and MHLS survey items) were altered from their original presentation to IRB. IRB approval occurred on August 22, 2002. My committee chair reviewed the survey in its electronic form after IRB approval was obtained as a validity measure. Once final approval from my committee chair was granted, I initiated my plan for recruitment of participants for the study. A survey invitation and electronic link was forwarded to foster parents under the regional foster division's umbrella of supervision. Participating foster parents accessing the survey were given clear information regarding informed consent, the autonomy of participants, and the uniform questions assessing demographic information and the MLHS questionnaire.

I collected survey responses from mid-September through mid-November 2022. A total of 59 responses occurred. According to the "Rule of Ten" approach discussed by Peduzzi et al. (1996), a minimum of 40 responses equally split across "yes" and "no" outcome variable responses were required. This approach has been considered conservative by some and is consistent with use with logistic regression analysis (Vittinghoff & McCulloch, 2007)

Cleaning the data revealed cases in the "no" response category characterized by insufficient completion of the survey, thereby dropping the total number below the minimum 20 cases. Therefore, I send an additional reminder email to participate in the study that generated additional "no" responses to fulfill a needed sample size of responses. The sample size was 42 participants. After cleaning the data, a total of 22 "yes" responses and 20 "no" responses comprised the data set. Some characteristics of

the sample compared similarly to other demographics for Florida. The winsorized age of the sample was *Mdn* = 39 years old and median age for Florida was 42.2 years old (see U.S. Census Bureau, 2020). The sample seemed less comparable to state figures when analyzing education. A comparison of participants having an associate degree or higher resulted in 76% of the sample compared to 38.41% of the state of Florida (see U.S. Census Bureau, 2020). It is also notable that the pattern of responding among participants was like that of prior research. Kirby (1997) described Michigan foster parent demographic data that responded to a survey approach in the following way: female (77%), college level education (63%), White (78%), and Christian (78%).

There were 42 total participants (see Table 1 for demographic details). Males represented 9.5% of the sample, while females represented 90.5% of the sample. Half of participants identified their location as urban, while 47.6% identified it as rural and 2.4% of participants were unsure of how to classify the area in which they resided. Participants indicated their race as Black (4.8%), White (88.1%), and Other (4.8%), with 2.4% preferring to not identify their race. Education was characterized by participants having an associate degree or less (33.3%), a bachelor's degree and some post undergraduate study (35.7%), or a master's degree or higher (31%). In terms of religious affiliation, 76.2% of participants identified as Christian, 9.5% had no religious affiliation, and 14.3% opted to not describe their religious orientation. Most of the sample was heterosexual (83.3%) with less of the sample being gay or lesbian (4.8%) and bisexual (9.5%). Participants who preferred to not disclose their sexual orientation accounted for 2.4% of the sample. Participants identified themselves in four categories related to their economic

class: 2.4% identified as poor, 11.9% identified as working class, 76.2% identified as middle class, and 9.5% identified as affluent. I found an outlier in the age category. To address this, I transformed the outlier using a winsorization recoding process to preserve data points instead of eliminating them. The age of participants (M = 43.62, SD = 12.31) ranged from 25 to 81 years old without winsorization. The winsorized age of participants was represented by similar central tendency statistics (M = 43.381 and SD = 11.65).

Current scholarship profiling data trends on demographics of foster parents nationally is scant. Though small, my sample showed similarities to demographic trends reported in a dated, larger study conducted by Kirby (1997). Kirby's research revealed that among 218 foster parents, 77% were female and 78% were White. The sample in the current study was 90% female and 88.1% White. Among Kirby's sample, 63% had education outside of high school, which compares with the approximate 66% of the participants having a bachelor's degree or more in the current study. Orme and Cherry (2015) described age within a large sample of foster parents (N = 876) as an average of M = 47.83 with SD = 11.24. In the current study, averages for the participants' ages were M = 43.62 and SD = 12.31. Though the sample size was small in the current study, there were data points comparable to statewide demographic data and that were similar to other research focusing on foster parents in a different state using a similar research design.

Table 1

Demographic Data for Categorical Variables

Demographic variable		Frequency	Percent
Gender	Male	4	9.5%
	Female	38	90.5%
Location	Urban	21	50%
	Rural	20	47.6%
	I don't know	1	2.4%
Race	Black	2	4.8%
	White	37	88.1%
	Other	1	2.4%
	Prefer not to answer	2	4.8%
Education	Associate degree or less	14	33.3%
	Bachelor's degree and some post	15	35.7%
	bachelor study	13	31%
	Master's degree and higher		
Religious	Christian	32	76.2%
orientation	No religious affiliation	4	9.5%
	Prefer not to answer	6	14.3%
Sexual identity	Heterosexual	35	83.3%
	Gay or lesbian	2	4.8%
	Bisexual	4	9.5%
	Prefer not to answer	1	2.4%
Economic class	Poor	1	2.4%
	Working class	5	11.9%
	Middle class	32	76.2%
	Affluent	4	9.5%

Results

I begin this section by providing a detailed explanation of the data analysis process. All data analyzed were both cleaned and coded. I also performed analysis to verify that all assumptions for performing a logistic regression were met. An outlier emerged in one category of data that was addressed through winsorizing. Following these steps, I analyzed my data set using a logistic regression and interpreted the results.

Cleaning and Coding

After dissemination of the survey, a total of 59 surveys were captured by SurveyMonkey. Of these 59 surveys, I had to delete 17 because they were incomplete, thereby not yielding data that could be analyzed. The remaining 42 fully completed surveys remained after this. I then coded and cleaned data from these surveys to prepare for running descriptive statistics and a logistic regression. During the cleaning and coding process, I communicated and shared my data set with my chair for regular quality assurance checks.

In this phase of data preparation, I found that Question 10 erroneously had five instead of four answer selections. The impact of this error was negligible. The only data point that this error affected was the average cumulative MHLS scores for the entire data set. To assess the level of impact of this error on cumulative MHLS scores, I compared model summary and significance level statistics of the data set left as is, with Question 10 trimmed, and with Question 10 omitted. Question 10 should have had four answers choices where participants rated their agreement across four levels of likelihood. The coded version of this essentially was essentially a 1-4 scale. The data set left as is

corresponded with each level of agreement being equal to increments of .6 instead of 1 to fit five responses on a four-response question. The second data set was trimmed to reflect to a 4-point scale because the lowest bound of this question was not selected by any participant. The final data set omitted the question entirely. Table 2 reflects a comparison of model summary statistics showing the negligible impact that this error had on significance level. I decided to keep the data set that included the error.

Table 2

Data Set Comparison of Model Summary Statistics

Data set	Chi-square	Significance
Cumulative MHLS score as is	3.786	.151
Cumulative MHLS score trimmed	3.706	.157
Cumulative MHLS score omitted	4.081	.130

Assumptions

Sample Size

To achieve an appropriate sample size I used a “Rule of Ten” strategy given the small population that was the focus of this study. Peduzzi et al. (1996) demonstrated how to achieve statistically adequate samples with logistic regressions by calculating sample size according to 10 events per predictor variable. This equated to 40 minimum participants in the current study. I exceeded this minimum sample size with $N = 42$.

Multicollinearity

In addition to obtaining an appropriate sample size I assessed for the avoidance of multicollinearity among predictor variables. Within a logistic regression, linearity cannot

be measured using the same protocols as other regression analyses, so the variance inflation factor (VIF) coefficient may be used to determine the presence of multicollinearity (Pallant, 2020). According to Vittinghoff (2006), the threshold for an acceptable VIF is 10 or less. VIF for the current study was well within range to meet assumptions for running a logistic regression analysis (see Table 3).

Table 3

VIF Coefficients for Independent Variables

Independent variables	VIF
Winsorized age	1.167
Cumulative MHLS score	1.167

Normality and Outliers

Checking for normality among variables and assessing for outliers contributes to credibility of statistical findings. I assessed for normality and outliers using histograms, box plots, and evaluating Shapiro-Wilk coefficients. These three methods are standard means for determining normality and identifying outliers (Das & Imon, 2016).

I performed tests for normality upon age and cumulative MHLS scores. The Shapiro-Wilk test revealed statistical significance with a *p* value greater than .05, indicating normality for cumulative MHLS score. The same test revealed a *p* value less than .05 ($p = .010$), indicating non-normality for age prior to winsorizing. Table 4 visually represents these findings. I found that the variable of age housed one outlier. Figure 1 visually represents this finding. To address this problem the single outlier case was transformed using winsorization procedures. Winsorizing data is a data

transformation procedure that preserves data points from being altogether thrown out and was accomplished by recoding the outlier case as one unit more than the highest data point that was not an outlier (see Mulry et al., 2016; Tukey, 1962). After winsorizing the outlier, the age variable met assumptions for inclusion in the logistic regression. The Shapiro-Wilk coefficient exceeded $p = .05$, indicating normality ($p = .150$).

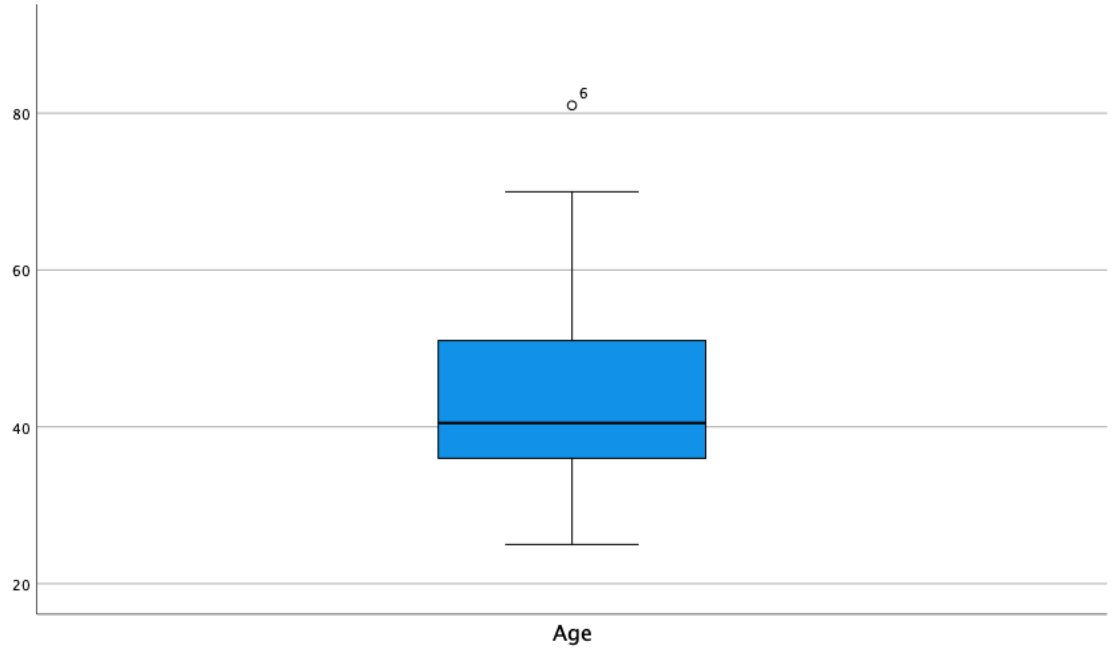
Table 4

Shapiro-Wilk Significance Values for Normality Among Independent Variables

Independent variables	Significance
Age	.010
Winsorized age	.150
Cumulative MHLS score	.517

Figure 1

Boxplot of Participant Unwinsorized Age



Statistical Analysis

Descriptive Statistics

After concluding that assumptions were met, I ran descriptive statistics on both independent and dependent variables as demographic variables. I collected data using the following demographic variables: gender, age, locale, race, education level, religious affiliation, sexual orientation, and economic class. All demographic variables were categorical except for age. Of these demographic variables age met assumptions for the logistic regression analysis and was selected over other variables because of precedent in the literature for analysis. The sample was predominantly female (90.5%). When age was not winsorized, M = 43.62 and SD = 12.31. The location of foster parents was almost evenly split with participants identifying themselves as urban (50%), rural (47.5%), or

did not know (2.5%). Most of the sample possessed a college education with 66% having a bachelor's degree or higher. Seventy-six percent of participants were Christian with 9.5% having no religious affiliation and 14.3% not preferring to not identify. Most participants were heterosexual (83.3%) with 4.8% being gay or lesbian and 9.5 % being bisexual. Participants identified the most as middle class (76.3%), followed by working class (11.9%) and then affluent (9.5%) and poor (2.4%). Descriptive statistics of the predictor variable, cumulative MHLS scores revealed that M = 106.110, SD = 5.872, σ = 34.484. The MHLS assessment has a maximum score of 160 and a minimum score of 35. Descriptive statistics of the outcome variable, mental health service use showed that 52.4% of participants had used mental health services while 47.6% had not.

Logistic Regression

I conducted a binary logistic regression to determine the likelihood that age and MHLS scores would have a statistically significant relationship with mental health service utilization. The model contained two independent variables (age, MHLS score). With both predictors included, the full model did not produce statistically significant results χ^2 (2, N = 42) = 3.786, p = .151. These figures indicate that the model did not reveal statistically significant differences. The model was able to explain 8.6% (Cox and Snell R Square) and 11.5% (Nagelkerke R Square) of the variance within use of mental health service use of foster parents yet the findings were not statistically significant. The model classified 64.3% of cases correctly.

Though my main findings failed to reject the null hypothesis there was a statistically significant finding between winsorized age and cumulative MHLS score. A

moderate negative correlation was found between age and MHLS score with Pearson's r = -.393 and p = .01. This indicated that as age increased, MHLS scores decreased with a moderately strong correlation.

Summary

The purpose of this quantitative study was to determine if age and MHLS scores predict mental health services utilization among foster parents. The independent variable measured was the use of mental health services. Dependent variables included age and MHLS scores. A logistic regression was used to answer my research question. The results of the logistic regression demonstrated no statistically significant findings between the dependent variables (age and MHLS) and mental health service use. As a result, I failed to reject the null hypothesis. A secondary finding was a statistically significant correlation between age and MHLS scores. In the following chapter I will discuss both implications and limitations of these results. I will also explore how this study might inform future research as well as address social change implications.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to determine if a statistically significant relationship exists between age and MHLS scores with mental health service use among Florida foster parents residing in the northwest Florida Panhandle. MHL is a concept representing a theoretical capacity informing individuals to respond as helpfully as possible to mental health problems (Jorm, 2000). Diminished MHL has been shown to affect utilization of mental health services (Hyland et al., 2015). Dimensions of MHL among foster parents have been researched internationally, but no available research addressing the discrete concept of MHL within the United States could be found in the corpus of scholarly literature (Mosuro et al., 2014). Foster parents are fundamental to the child welfare system in the United States, so exploring their attitudes and beliefs about mental health is critical. I used the MHLS questionnaire to determine MHL level. Age has been shown to influence having more favorable attitudes towards and the use of mental health services (Bonabi et al., 2016; Mackenzie et al., 2006).

This study aimed to fill a clear gap in the literature by determining how MHL level relates to mental health service utilization among foster parents residing in the northwest Florida Panhandle. I used a survey design to examine this relationship and employed a logistic regression to analyze the data. The results of the data analysis revealed findings that were not statistically significant. An unexpected finding was the negative correlation between MHLS score and age that was moderately significant (r = -.393). In Chapter 5, I provide my interpretation of the findings, the study limitations, my recommendations for future research, and the implications for social change.

Interpretation of Findings

The results of this study did not indicate a statistically significant relationship exists between MHLS scores or age with mental health service use. I anticipated that MHLS scores and mental health services utilization would have a strong correlation based upon prior research indicating that a low level of MHL was associated with less initiation of mental health services (see Bonabi et al., 2016). Age was also found to not be significantly associated with mental health service use. This finding ran counter to prior research that indicated that younger age was associated with a higher instance of mental health service use (DiNapoli et al., 2016).

An exploratory finding was a statistically significant relationship between the independent variables of winsorized age and MHLS scores (r = -.393). As age increased, MHLS scores decreased. Prior research suggested that as an individual increases in age, stigma decreases and acceptance of mental health concepts also increases (Time to Change, 2015). However, Hadjimina and Furnham (2017) reported that increasing age reduced symptom recognition for anxiety disorders. It is unclear how age influences MHL, and this relationship likely depends on other moderating factors.

Demographic characteristics of the sample were dominated by certain groups. Females overwhelmingly responded more readily than males did evidenced by the sample being 9.5% male and 90.5% female. The sample was also dominated by individuals identifying as White (88.1%), heterosexual (83.3%), and of the Christian religion (76.2%).

A comparison of mean scores of the MHLS across populations offers insight into foster parents. Foster parents' mean score on the MHLS in this study was 133.52. An Australian sample of general community members had a mean MHLS score of 127.38, while Australian mental health professionals' mean MHLS score was 145.49 (O'Connor & Casey, 2015). An additional study in the United Kingdom showed that among medical students in the university, a mean MHLS score of 127.69 was found (Marwood & Hearn, 2019). I did not locate any studies addressing MHL in the United States in the literature. When compared to other populations, the foster parent participants in the current study performed better than laypeople and students receiving medical training across two different populations. It is possible that foster parents' level of MHL was enhanced as a result of specialized training required of the role of foster parents. Regardless of cause for the elevation in MHLS mean scores of foster parents, it is desirable for such a specialized population to demonstrate collectively higher average scores of MHLS than other populations given their frontline status in the child welfare system.

While the main findings from the current study did not have statistical significance, the study is still important. The overall representation of foster parents in scholarly literature is lacking, so filling this void to add to the overall body of research literature on this population may be helpful. Moreover, this study is the first of its kind in that it addressed assessing MHL and the mental health service use of a very specific population. This study might be a catalyst for future studies seeking to understand the attitudes and beliefs of foster parents as they relate to mental health concepts.

Limitations of the Study

There are multiple limitations to this study that should be considered. The research design itself was a survey design that is correlational. Causality among any variables addressed cannot be determined as a result of the correlational nature of the study (see Asamoah, 2014). An additional limitation rests in the survey approach used for data collection. The survey design used successfully enabled participants to respond remotely and reduced the cost of the research project, but it did introduce limitations to the study. It is possible that response bias influenced the type of participants that responded or even did not respond to the survey and that respondents may have answered under the assumption that there were favorable answers (see Queirós et al., 2017).

An additional limitation was the testing instrument used in the study. O'Connor and Casey (2015) reported that the MHLS was psychometrically sound, showing itself to be a reliable and valid instrument ($\alpha = .873$, $r = .797$, $p < .001$). Despite this, it is possible that the MHLS could not adequately capture the attitudes and beliefs of foster parents. Were there other assessments for measuring MHL available for use that could be compared to MHLS scores, this could be better understood.

I obtained the data analyzed in this study from a small sample size. To minimize the potential impact of this limitation, the "Rule of Ten" approach was used to achieve the recommended sample size (see Peduzzi et al., 2016). While these measures are consistent with guidance found in scholarly literature, there may be the possibility for alternative results if the sample were larger. The sample itself also bore unique qualities that may be related to response patterns on the survey. The homogenous nature of

demographic traits of the sample could have influenced outcomes. These suggestions are speculative and are not substantial enough given the data produced by the study to draw a conclusion that they indeed limited the study, but there is room to consider their possible influence.

A final area warranting attention was the presence of an outlier regarding age and an error on one question of the MHLS survey. I manifested and winsorized the one outlier to retain it for data analysis by reducing it to the next highest value of the data set that was within the normal distribution. The advantage of this strategy outweighed removing the data point altogether but could have influenced the overall results. Additionally, an error made by inserting one too many answer selections on Question 10 of the survey occurred but showed minimal influence on significance or the modeling when three comparison logistic regressions using data obtained as is, trimmed, and then omitted were run.

Recommendations

The results of this study extend previous research about foster parents or their attitudes about mental health service use because there was a clear gap in the literature addressing foster parents. While the results of the present study were not statistically significant, they represent a first step in invoking formal scholarly dialogue about foster parents, MHL, and their use of mental health services. Future research might focus on determining more ways to measure MHL as a formal concept for studies like this one where MHLS scores represented a general capacity for beliefs about mental health diagnoses and care of affected individuals. A secondary finding was the moderate

correlation (r = -.393) found between age and MHLS scores. From reviewing the literature, I found that there is no clear precedent on the influence that age has on MHL. Future research that seeks to explain how the age of foster parents influences their MHL could add to a more enhanced understanding of how this specific population operates. An additional recommendation for future research based upon data from this study is targeting foster parents across other areas in Florida and beyond to determine how comparable data are regionally.

Implications

Foster parents occupy a fundamental role in the care of vulnerable children within the United States. They are tasked with caring for children with objectively more mental health needs and poorer long-term outcomes compared to children not in foster care (Gypen et al., 2017). Ensuring that foster parents have the capacity to recognize and respond to the mental health needs of others is a needed skill. Just as important is the ability for foster parents to both recognize and respond appropriately to their own mental health needs that may come as a byproduct of their role. I could find no extant research that addressed foster parents' MHL or their relationship with mental health service utilization.

While this study did not result in any statistically significant main findings, the data that were produced serves as a benchmark for ongoing research and insight into foster parents' beliefs and attitudes. For stakeholders at the community level, the data revealed a highly homogenous sample. The descriptive statistics produced by this study might be helpful for stakeholders to use to more strategically structure recruitment

efforts, evaluate diversity concerns, and consider how demographic qualities of foster parents in the northwest Florida Panhandle compares to other regions. To intelligently leverage the power that stakeholders have over the foster care system, empirical data are needed to properly diagnose problems and identify strengths of community systems of care.

Conclusion

The purpose of this quantitative study was to produce objective data about foster parent attitudes toward MHL and their experience with mental health services. Data addressing MHL or experience with mental health service use was absent from the corpus of scholarly literature and from community stakeholders in the northwest Florida Panhandle where the study was completed. In this study, MHLS scores and age were not found to have a statistically significant relationship with the use of mental health services. However, the study was successful in achieving the key objective of establishing a data-driven view on foster parents' MHL and mental health service utilization. Prior to this study, a gap in the literature existed on this topic. Though statistical significance between the independent and dependent variables was not found, I obtained data that can be used for future research to better understand foster parents in Florida and beyond. Future researchers can build upon the current study to focus on the accurate measurement of MHL as well as understanding foster parents' attitudes and beliefs about mental health concepts on a larger scale, which would benefit local, regional, and state stakeholders and be a worthy cause for mental health counselors given the profession's goal to advocate for mental health care issues (see American Counseling Association, 2014).

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Appendix A: Author Permission to Use MHLS Testing Instrument

RE: Permission to Use MHLS for Dissertation Research

[redacted]

Tue 6/8/2021 11:22 PM

To: Adam Johnson[redacted]

HI Adam,

Thank you very much for your interest in the MHLS, it is always a pleasure to hear from a researcher with a similar interest in this area. You are welcome to use the MHLS for your research

For the questions relating to Australia, we have been suggesting that researchers look at population level data for their country and modify the answer accordingly. In addition, given the changes in the DSM 5, we are suggesting that you modify:
Q5 to: To what extent do you think it is likely that Persistent Depressive Disorder (Dysthymia) is a disorder
Q8 to: To what extent do you think it is likely that the diagnosis of Substance Abuse Disorder can include physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Please keep me updated on your research as we would be interested to hear how it progresses

---

From: Adam Johnson [redacted]
Sent: Thursday, 3 June 2021 2:04 PM
To: [redacted]
Subject: Permission to Use MHLS for Dissertation Research

Dr. [redacted] and Dr[redacted],

I am a graduate student at Walden University completing a dissertation in Counselor Education and Supervision. I am writing to ask written permission to use the Mental Health Literacy Scale (MHLS) in my research study. I am studying the relationship between mental health literacy and training level on foster parents' use of mental health services. My research is being supervised by my professor, Sidney Shaw, EdD, LCPC.

I intend to use the MHLS survey without any change to its original format, but would administer the questionnaire electronically. American foster parents in the state of Florida are the focus of my study and I am measuring the concept of mental health literacy making the MHLS questionnaire of great relevance for my study.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. If there are documents that might be provided to me to appropriately score the MHLS I would greatly appreciate them.

I would like to use [and reproduce] the MHLS under the following conditions:

- I will use the MHLS only for my research study and will not sell or use it for any other purposes
- I will include a statement of attribution and copyright on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript.

[redacted]

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail at [redacted]

Sincerely,

Adam Johnson

[redacted]

Appendix B: Mental Health Literacy Scale

Mental Health Literacy Scale

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 **Generalised 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 **Bipolar Disorder** 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 **Drug Dependence** 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, **women are MORE likely to experience a mental illness of any kind compared to men**

Very unlikely Unlikely Likely Very Likely

10
To what extent do you think it is likely that in general, in Australia, **men are MORE likely to experience an anxiety disorder compared to women**

Very unlikely Unlikely Likely Very Likely

When choosing your response, consider that:

- Very Unhelpful = I am certain that it is NOT 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 IS very helpful

11
To what extent do you think it would be helpful for someone to **improve their quality of sleep** 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 **avoid all activities or situations that made them feel anxious** 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 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

13
To what extent do you think it is likely that **Cognitive Behaviour Therapy (CBT)** 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 **break confidentiality**:

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 **break confidentiality**:

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

Reference

O'Connor, M., & Casey, L. (2015). The mental health literacy scale (MHLS): A new scale-based measure of mental health literacy, *Psychiatry Research,* http://dx.doi.org/10.1016/j.psychres.2015.05.064