

2016

High School Teachers' Perceptions of Mental Health and Adolescent Depression

Christine Ann Breuer
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Educational Psychology Commons](#), [Psychiatric and Mental Health Commons](#), and the [Psychology Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Christine Breuer

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Cheryl Tyler-Balkcom, Committee Chairperson, Psychology Faculty
Dr. Carl Valdez, Committee Member, Psychology Faculty
Dr. Steven Little, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

Abstract

High School Teachers' Perception of Mental Health and Adolescent Depression

by

Christine Breuer

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2016

Abstract

Adolescents have a high rate of untreated mental health issues, specifically related to depression. Current literature does not indicate the impact of teachers' attitudes toward mental health on their decisions to refer students for services. This study provides understanding specifically, how teachers' beliefs about mental health, as well as their age, gender, ethnicity, years of education, and years of teaching, were analyzed to determine the impact each these characteristics had on the decision to refer a student for services. 92 high school teachers participated in this quantitative study by completing a survey measuring their attitudes of mental health, and then responding to scenarios on which they answered "yes" or "no" to indicate whether they would refer students for services in certain situations. This information was analyzed through multiple regression and descriptive analysis to determine the relationship these characteristics had with the decision to refer. The data suggested that teacher characteristics related to age ($\beta = 1.516$, $t = 2.075$, $p < .05$), gender ($\beta = -3.336$, $t = -2.220$, $p < .05$), psychological openness ($F(5, 86) = 2.488$, $R^2 = .126$, $p < .05$), and indifference to stigma ($F(1, 90) = 5.395$, $p = 0.022$) all impacted participants' decision to refer a student for services in the scenarios presented. This study has implications for social change in how teachers are trained concerning mental health awareness and the impact of their personal beliefs on their efforts to help adolescents' access mental health services. Increasing teacher awareness related to the issue of helping adolescents' access mental health services is the desired outcome of this study. Such change could result in adolescents gaining access to services for greater opportunity to reduce depressive symptomology.

High School Teachers' Perception of Mental Health and Adolescent Depression

by

Christine Breuer

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2016

Acknowledgments

I would like to thank my committee chair, Dr. Balkcom, who has been so supportive of me during this entire process. She has helped me progress through the dissertation process to make it to the “light at the end of the tunnel.” I would also like to thank Dr. Valdez for all of his help, specifically with methodologies. I could not have gotten this done without both of you and all of the input that you provided to me.

I want to thank my friends who have stuck by me through this long, treacherous process and haven’t given up on me. When this is all over, we will have plenty of time to catch up and have some fun! Thank you for having my back.

I especially want to thank my family members who have given me so much support and have been willing to help in any way they could. I could not have made it through this program and my doctorate degree without either of you. I hope you know how much your support and love have meant to me! I could never repay you for all that you have given up to make this happen for me.

Table of Contents

List of Tables	v
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background.....	3
Statement of the Problem.....	5
Purpose of the Study.....	8
Research Question	8
Hypotheses.....	10
Theoretical and/or Conceptual Framework for the Study.....	14
Nature of the Study	15
Definitions.....	15
Assumptions.....	17
Scope and Delimitations	17
Limitations	18
Significance.....	18
Summary.....	19
Chapter 2: Literature Review	20
Introduction.....	20
Literature Search Strategy.....	21
Theoretical Foundation	21
Literature Review Related to Key Variables/Concepts	24

Mental Health in Children	24
Prevalence of Adolescent Depression.....	24
Importance of Early Identification.....	26
Intervention Effectiveness	28
Time Spent in School.....	30
Role of Teacher.....	30
Current Referral Process.....	33
Teachers and Decision Making.....	34
Impact of Perception/Attitudes on ID and Decision Making.....	35
Current Research on Teacher Attitudes Related to Decision Making	39
Summary and Conclusions	40
Chapter 3: Research Method.....	42
Introduction.....	42
Research Design and Rationale	42
Methodology	47
Population	47
Sampling and Sampling Procedures	47
Sample Size.....	48
Procedures for Recruitment, Participation, and Data Collection.....	48
Instrumentation and Operationalization of Constructs	49
Threats to Validity	51
Ethical Procedures	52

Summary	53
Chapter 4: Results	54
Descriptive Statistics	54
Demographics of the Sample	54
Preliminary Findings	56
Research Questions and Hypotheses	57
Research Questions 1, 2, and 3	58
Research Questions 4 and 5	59
Research Question 6	61
Research Questions 7 and 8	61
Research Question 9	62
Further Analysis	63
Summary and Conclusions	64
Chapter 5: Conclusion	65
Introduction	65
Interpretation of the Findings	66
Implications	67
Positive Social Change	69
Limitations of the Study	71
Recommendations	72
Conclusion	73
References	76

Appendix A: Study Introduction Letter	84
Appendix B: Consent Form	85
Appendix C: IASMHS Scale	87
Appendix D: Demographic Information	89
Appendix E: Case Vignettes	90

List of Tables

Table 1. Demographic Information of Participants—Gender.....	54
Table 2. Demographic Information of Participants—Age.....	55
Table 3. Demographic Information of Participants—Ethnicity.....	55
Table 4. Demographic Information of Participants—Education	55
Table 5. Demographic Information of Participants—Years Teaching	56
Table 6. Multicollinearity: Tolerance and VIF	57
Table 7. F-Ratio Analysis: Total IASMHS Score	58
Table 8. F-Ratio Analysis: Indifference to Stigma	59
Table 9. Predictors: Psychological Openness	60
Table 10. Predictors: Help-Seeking Propensity	61
Table 11. Predictors: Indifference to Stigma	62
Table 12. Scenario 1	63
Table 13. Scenario 2	63

Chapter 1: Introduction to the Study

Introduction

According to Mori, Panova, Keo, Cheung, and Stokes (2007), approximately 26.2% of Americans over the age of 18 exhibit signs of a diagnosable mental health illness. Young adults are the group at greatest risk for exhibiting symptoms related to mental health issues (Mori et al., 2007). Early identification and intervention become critical factors in determining how mental health issues affect young adults later in their lives (Reinke, Stormont, Herman, Ruir, & Goel, 2011).

Many of the symptoms related to mental health illness emerge before the age of 18 years (Reinke et al., 2011). In fact, research indicates that mental health concerns in children under the age of 18 years of age occur at a rate of 20% (Reinke et al., 2011). The percentage increases to 25% if there are concerns relating to environmental factors (Reinke et al., 2011). Adolescent high school students experience hormonal changes that can impact their biological and psychosocial development (Kirchner, Yoder, Kramer, Lindsey, & Thrush, 2001) and can trigger mental health related symptoms and issues. Early identification is important at this stage of development due to the biological and psychosocial changes that occur during this time.

Children under the age of 18 are typically attending school. This makes the school setting ideal for early identification and intervention when a student exhibits mental health concerns (Reinke et al., 2011). Teachers can play important roles in identifying and referring students for help related to mental health symptoms and concerns (Reinke et al., 2011). Teachers have agreed that they feel that the school setting is an integral part

of supporting mental health interventions (Reinke et al., 2011). A study performed by Reinke et al. (2011) indicated that teachers are willing and open to referring students if they need services, yet there still seem to be issues with identifying students who need help.

The topic of this study was high school teachers' personal attitudes concerning mental health and how these attitudes impacted their decision to refer a student who was experiencing symptoms of depression. In this study, I sought to determine the relationship between a teachers' personal attitudes about mental health and their determination to refer a student to get help. There was a need for this study in order to explore the impact of personal attitudes on decisions to refer. Students are often not referred for mental health support when they present symptoms in school (Auger, 2004). Children in the school setting exhibit symptoms related to mental health diagnoses, and early identification is important to increase their chances of decreasing symptoms as they grow into adulthood (Loades & Mastroiannopoulou, 2010).

In this chapter, I identify why children exhibiting symptoms of mental health disorders are important, and why teachers play a role in early intervention for adolescents. I also explain the need for the study, as well as the purpose for the study. I explain the research questions as well as the variables that were used to determine the impact of high school teachers' personal attitudes toward mental health on their referral for services.

Background

A teacher's decision to refer a student for mental health services is a part of the process of identifying students with mental health symptoms. Loades and Mastroyannopoulou (2010) indicated that researchers should look at the decision-making process teachers use to refer a student for services. Auger (2004) indicated that teacher characteristics are a factor that impacts the decision-making process. The theoretical framework used in this study indicates that beliefs and attitudes drive decisions (Webb, Sniehotta, & Michie, 2010). To begin to understand teachers' decision-making process, it is necessary to explore teachers' personal attitudes about mental health and how they impact their decision to refer.

Studies have indicated that teachers are in a role in which they can help with early identification and early intervention related to symptoms of mental health (Williams, Horvath, Wei, Van Dorn, & Johnson-Reid, 2007). Prior studies have identified that further exploration into teacher characteristics is necessary in order to understand why children are not accessing mental health services related to their mental health symptoms (Auger, 2004). One of these characteristics happens to be the teacher's perception of the problem (Loades & Mastroyannopoulou, 2010). If teachers do not perceive mental health to be a concern, the likelihood of them identifying or even referring a child to get help will be limited. I examined teachers' personal attitudes toward mental health needs in order to determine the impact they may have on early identification of mental health related issues in adolescent students. There has been a need for further research to

determine how teachers' personal attitudes toward mental health impact their decision to intervene (Auger, 2004).

Teachers are expected to share concerns related to students' mental health (Loades & Mastroyannopoulou, 2010). Specifically, teachers are called upon to be professionals playing a role in problem recognition and early identification of mental health concerns in students (Loades & Mastroyannopoulou, 2010). Processes that teachers are expected to use to refer a student for concerns related to mental health vary from school to school, district to district, and even state to state. Research has indicated that many teachers are not aware of the services that are available to students who have mental health symptoms (Loades & Mastroyannopoulou, 2010) and that trainings related to informing teachers of services can be difficult due to the numerous other trainings teachers have to attend (Reinke et al., 2011).

According to recent legislation, schools are expected to use evidence-based practices in responding to and addressing mental health related symptoms in the school setting (Reinke et al., 2011). Reinke et al. (2011) completed a study in which they explored the reasons why teachers may not be aware of practices and policies they were expected to follow when a student in their classroom exhibited mental health symptoms. Training and informing teachers about the practices and policies were the biggest issues teachers shared related to current practices in place (Reinke et al., 2011). Reinke et al.'s 2011 study did not look at the current process in place; it simply looked at the teacher's decision to refer a student who is exhibiting mental health symptoms related to depression.

Adolescents with mental health issues need early intervention for services in order to be successful in their adult years (Auger, 2004; Loades & Mastroyannopoulou, 2010). Struggling with untreated mental health symptoms can lead to negative quality of life as well as academic underachievement (Loades & Mastroyannopoulou, 2010). Behavior problems related to mental health symptoms can lead to behavioral issues at school, resulting in suspensions and expulsions (Loades & Mastroyannopoulou, 2010). Research has also indicated that a lack of treatment for mental health symptoms can lead to antisocial behavior as well as substance abuse in adulthood (Loades & Mastroyannopoulou, 2010). Teachers play a role in referring students for mental health services. Greater understanding of how teachers' personal attitudes about mental health impact access to services is needed in order to have more positive outcomes for more adolescents.

Statement of the Problem

Symptoms of mental health problems often begin at an early age (Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010), and as a result, children and adolescents are often dependent on adults to notice emerging issues (Jorm et al., 2010). Along with noticing the symptoms, children and adolescents are dependent upon adults to take action to address the symptoms (Jorm et al., 2010). Studies indicate that 20% of children under the age of 18 display mental health symptoms (Reinke et al., 2011).

Adolescents are dependent upon adults to notice any depression symptoms they may be experiencing (Loades & Mastroyannopoulou, 2010). The rate of occurrence of these symptoms makes adolescent depression a critical area to address in order to help

them access services. Of the children who have symptoms, 12-15% show symptoms at a level that warrants intervention, while another 15% are in the at-risk range and may not exhibit overt behaviors (Repie, 2005). Repie (2005) also reported that approximately 40% of children in schools are at risk of not becoming successful adults due to either not being identified or not receiving services to address their symptoms. In order for children to obtain services, adults need to refer students to get help related to their mental health needs. The process by which they obtain help was not part of this research study; it focused solely on the impact personal attitudes toward mental health have on a teacher's decision to refer a student for services.

To narrow the scope of the study, symptoms related to depression in the adolescent population were the primary focus. Studies have indicated that the occurrence of depression nearly triples during the adolescent years (Gladstone & Beardslee, 2009; Wilkinson, Croudace, & Goodyer, 2013). Depression is known to affect up to 20% of girls and 7% of boys before the end of their adolescent years (Possel, Rudasill, Sawyer, Spence, & Bjerg, 2013). Not only does depression impact current functioning, it also impacts future functioning and development (Ellonen, Kaariainen, & Autio, 2006; Trudgen & Lawn, 2011) and has been seen as a severe threat to adolescent well-being (Ellonen et al., 2006).

Given the amount of time that teachers spend with adolescent students, it would be easy to assume that they have information on and awareness of symptoms related to depression (Possel et al., 2013). Adolescents spend half of their waking time in school (Ellonen et al., 2006). This is a significant amount of time with adults who could play a

role in identifying symptoms related to depression. Although adolescents spend the majority of their time in the school setting (Possel et al., 2013), research has suggested that teacher awareness of depression symptomology is limited.

Teachers have some knowledge and awareness of depression symptomology, yet only in severe cases (Auger, 2004; Mattison, Carlson, Cantwell, & Asarnow, 2007; Kurumatani et al., 2004). Of the severe cases, almost all cases related to externalizing behaviors in the classroom (Loades & Mastroyannopoulou, 2010; Williams et al., 2007). Repie (2005) found that teachers identified behaviors related to ADHD as more important than behaviors related to suicide and depression. This means that an adolescent experiencing symptoms of depression would have to act out in the classroom in order to get some attention, ideally leading to a referral for support. If this adolescent did not act out behaviorally, he or she might continue to exhibit symptoms without any intervention (Loades & Mastroyannopoulou, 2010).

There has been a need for further exploration of teachers' personal attitudes about mental health and the role it plays in referring a student for services. Auger (2004) found that factors such as age, gender, and familiarity with students were not consistent factors in teachers identifying students with depression. Auger indicated that more research needed to be done with teacher characteristics and how this impacts identification of students with depression. Teachers' personal beliefs about mental health needs were explored in order to understand the impact they have on their decision to refer a student for services. The concern is that if teachers are not referring students, specifically adolescent students, they will not receive the services they need in order to address

symptoms related to depression. Identifying the role of teachers' personal attitudes about mental health may assist with educating and training teachers to be aware of how their personal attitudes can impact their identification of students with mental health needs, and, more importantly, their decision to help students access services they may need to address their symptoms.

Purpose of the Study

I conducted a quantitative study to explore the impact of high school teachers' personal beliefs regarding mental health on their decision to refer a student for services for depression. The dependent variable that was measured was the high school teacher's decision to refer a student for mental health services specifically related to depression. The independent variable was the teacher's personal beliefs regarding mental health services. Specifically, what was measured was a teacher's openness to the idea of mental health, the teacher's likelihood of accessing mental health services if he or she had an issue, and finally, the teacher's indifference to the stigma that can be related to mental health support and diagnosis. Additionally, demographic factors and their relationship to teachers' personal beliefs about mental health were explored. Other demographic factors explored were age, years of teaching, gender, ethnicity, and years of education.

Research Question

Because teachers spend a significant amount of time with the adolescent population, they are in a key position to observe any behaviors that may indicate that students are at risk for depression and may need further evaluation (Auger, 2004; Kurumatani et al., 2004; Mattison et al., 2007; Possel et al., 2013). Prior research has also

shown that early identification of depression results in a higher level of success as well as a more positive outcome to life after high school (Reinke et al., 2011). If teachers are in a prime position to observe symptoms, their ability to identify symptoms, and any factors inhibiting their ability to identify symptoms, need to be explored. Furthermore, few studies have investigated how teachers' characteristics impact their decision making regarding referral for service for adolescents with symptoms of depression (Auger, 2004).

Research shows that multiple factors impact one's perceptions and attitudes about mental health. Religion, age, and gender have been shown to influence personal attitudes about mental health (Cruz-Sanchez, Feu, & Vizuetta-Carrizosa, 2011; Dow & Woolley, 2011). Society in general has a negative view of mental health services and the people who receive them (Sadik, Bradley, Al-Hasoon, & Jenkins, 2010). Because teachers come from diverse backgrounds and live within a society where these negative views and perceptions exist, the manner in which their perceptions of mental health impact their ability to identify students with symptoms of depression needs to be explored. The impact these factors have on teachers' perceptions has not been explored to determine the effect they have on referring adolescents for services related to depression. Further, prior studies have also indicated that teachers are more likely to identify externalizing symptoms as opposed to internalizing symptoms, which are more consistent with depression (Loades & Mastroyannopoulou, 2010). There is a need to explore teachers' characteristics regarding personal beliefs and perceptions of mental health and how they impact their ability to identify depressive symptoms in an adolescent.

This study used quantitative methods to identify teachers' personal beliefs about mental health services. A questionnaire was used to assess teachers' personal beliefs about mental health. Additional information was requested of teachers, such as age, years of teaching, gender, ethnicity, and years of education, to determine if any of these affected their personal beliefs concerning mental health. Scenarios were used to assess how a teacher responded to a student with depression symptoms. The teachers needed to read through scenarios to determine whether they would ("yes") or would not ("no") refer for further support. This information was then used to determine if their personal beliefs, and then other related factors, impacted their decision to refer the student for services.

Hypotheses

The purpose of this study, and the questions that it answered, was to provide insight into the specific teacher characteristic of personal beliefs and attitudes toward mental health services and how they impacted teachers' ability to identify a child with depressive symptoms.

The hypothesis was that teachers who have a positive attitude about mental health services and their benefits will be more likely to identify an adolescent with depressive symptoms. Teachers' positive attitude toward mental health services would allow them to be more aware of the issue of adolescent depression. This would then lead to awareness of the symptoms, leading to elevated ratings for depression.

On the other hand, teachers with more negative views of mental health services would be more likely not to identify an adolescent with depressive symptoms. Their negative attitudes regarding mental health would limit their awareness regarding certain

behaviors that are symptoms of depression. This would keep them from being concerned regarding these symptoms and lead to no elevations in ratings for depression.

A teacher's personal attitudes toward mental health services were measured through the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS). This scale measures three factors relating to personal attitudes: psychological openness, help-seeking propensity, and indifference to stigma. These three areas were used to measure a teacher's personal attitude toward mental health services.

The hypotheses for this study were as follows:

Null Hypothesis (H0) 1: Higher scores on personal attitude toward mental health services in the area of psychological openness will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 2: Higher scores on personal attitude toward mental health services in the area of help-seeking propensity will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 3: Higher scores on personal attitude toward mental health services in the area of indifference to stigma will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 4: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of age groups, will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 5: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in gender groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 6: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in ethnic groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 7: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of teaching groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 8: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of education groups, will result in teachers not referring a student for services (“no”).

Research Hypothesis (H1) 1: Higher scores on personal attitude toward mental health services in the area of psychological openness will result in teachers referring a student for services (“yes”).

(H1) 2: Higher scores on personal attitude toward mental health services in the area of help-seeking propensity will result in teachers referring a student for services (“yes”).

(H1) 3: Higher scores on personal attitude toward mental health services in the area of indifference to stigma will result in teachers referring a student for services (“yes”).

(H1) 4: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of age groups, will result in teachers referring a student for services (“yes”).

(H1) 5: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in gender groups, will result in teachers referring a student for services (“yes”).

(H1) 6: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in ethnic groups, will result in teachers referring a student for services (“yes”).

(H1) 7: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of teaching groups, will result in teachers referring a student for services (“yes”).

(H1) 8: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma,

when placed in years of education groups, will result in teachers referring a student for services (“yes”).

Theoretical and/or Conceptual Framework for the Study

The theoretical framework used for this study was the cognitive approach and the belief that behavior change occurs when changes to beliefs about a problem occur (Webb, et al., 2010). Specifically related to mental health, a person’s belief and attitude about mental health will impact the decisions he or she makes on whether to provide help (CDC, 2010). This theoretical basis indicates that when there is an attitude about a problem or possible solution, there is a difference, or change in behavior. This would indicate that if a teacher has a personal attitude that there is benefit in mental health services, he or she would have a heightened awareness that depression within the adolescent population exists. This awareness would lead to the teacher making the decision to refer students for services if he or she identifies symptoms of depression.

Many of these personal attitudes come from factors such as gender, ethnicity, age, years of teaching and even years of education (Midlarsky, Pirutinsky, & Cohen, 2012; Shanley, 1981; Weisz et al., 1991). Ensuring that the impact these variables had on personal attitudes of mental health was explored and was a part of this study. Since teachers are from a variety of backgrounds, analyzing the impact of the different variables was helpful in understanding how to approach future education and increasing referrals for students who exhibit symptoms of depression.

Teachers are a group of people who interact with the adolescent population for a majority of their day. By using this group of individuals in the study, it was possible to

provide an appropriate evaluation to determine the belief system a teacher has regarding mental health services and the impact this had on the teacher's recognition of depressive symptoms leading to a referral for services. This information supports the notion that teachers play an important role in early intervention for depression in the adolescent population.

Nature of the Study

This study was quantitative, with a questionnaire completed by the high school teacher participants. The questionnaire gathered information regarding the teachers' personal beliefs regarding mental health services. Teachers were asked to provide information regarding their years of teaching, years of education, gender, and ethnicity. This information was used in a regression analysis to determine the impact any of these variables may have had on the findings from the study. A discriminant analysis was used to test the hypotheses. The second part of data collection involved teachers being presented with scenarios. These scenarios were used to assess how a teacher would respond to a student with depression symptoms. The teacher needed to read through scenarios to determine whether he or she would refer for further support ("yes") or would not refer for further support ("no"). This information was used to determine whether teachers' personal beliefs, and then other demographic factors, impacted their decision to refer the student for services.

Definitions

Adolescent: A child aged 12-18 within the high school setting.

Attitude: Specifically, teachers' personal attitudes toward mental health services, defined as attitudes toward seeking psychological services as measured through the Inventory of Attitudes Towards Seeking Mental Health Services Scale.

Decision: In this study, refers to the teacher's conclusion regarding the information presented in the scenario, being either a "yes" or a "no" to refer for services.

Depression: Diagnostic criteria based on the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (DSM-V).

Help-seeking propensity: A person's willingness and ability to seek psychological help (Mackenzie et al., 2004).

Indifference to stigma: The individual's concern about how important people in their life would react to the individual seeking psychological help (Mackenzie et al., 2004).

Mental health: A person's health specifically related to his or her well-being.

Psychological openness: Being open to acknowledging psychological problems and being open to seeking help for them (Mackenzie et al., 2004).

Refer: In this study, simply means for the teacher to read the scenario provided and either say "yes" (i.e., the teacher would refer) or "no" (i.e., the teacher would not refer). A "yes" response does not indicate that the teacher would know whom to contact or how to go about referring; it simply indicates that the teacher would refer.

Services: In this study, simply means support to address any concerning behaviors teachers read about in reference to the student in the scenario. This behavior would need

more support than what is currently being provided through the classroom and school setting.

Symptoms: Specific behaviors that are aligned with diagnosis identified in the DSM-V.

Assumptions

This study involved an assumption that teachers are aware of mental health concerns related to adolescents in high school. Prior studies (Reinke et al., 2011) have indicated and measured teachers' awareness of mental health issues with regard to children. These prior studies are presented in the second chapter, in which prior research is described. This assumption was necessary for this study in order to present the teachers with the questionnaire regarding their personal beliefs about mental health.

The second assumption was that teachers would not be expected to know the process for referral, or to whom they would refer. They were only asked whether they would refer the student or not. Their knowledge of the process was not measured, only their decision to do something regarding the student in the scenario.

Scope and Delimitations

The focus of this study was chosen in order to begin exploring different teacher characteristics to determine how they may impact access to mental health services for adolescents. Addressing all of the possible characteristics that teachers may have would be a task too cumbersome to complete in one study. Teachers have many characteristics; however, it was determined that the personal attitudes of teachers could best be measured

and compared with a possible outcome through which this study will conclude if specified characteristics impact personal attitudes of mental health.

Limitations

In conducting this study, I recognized that there are many different factors and characteristics that can impact a teacher's decision concerning whether to refer an adolescent student to receive help for mental health concerns. This study did not explore which characteristics teachers may have. This study explored only their personal beliefs relating to mental health services, and how this impacted their decision to refer a student for help.

Significance

In this study, I began to explore one of the many characteristics that may factor into whether a teacher decides to refer an adolescent student for mental health services. More specifically, I began to look into the factors that contribute to how teachers make decisions to refer a student for mental health support. Prior research (Loades & Mastroyannopoulou, 2010) indicated that teacher decision making needs to be explored, and in order to do this, exploring teacher characteristics is necessary (Auger, 2004). Understanding how attitudes toward mental health impact a teacher's decision to refer a student for help with mental health symptoms is important in order for students to receive intervention.

There is a great need for adolescents to obtain services for mental health as soon as symptoms are present. The sooner services are offered, the greater a student's chance for success as he or she grows into adulthood (Loades & Mastroyannopoulou, 2010).

Research on factors related to teachers' decisions to refer may lead to higher chances of students receiving needed early intervention.

Summary

This chapter has presented the focus of this study. High school teachers were provided with a questionnaire on their personal beliefs regarding mental health services. They were then provided with scenarios to determine if they would refer a student for mental health services. All of this information was compared to determine whether teachers' personal beliefs about mental health impacted their decision to refer a student for services.

The research indicated that there is a high rate of symptoms related to mental health in adolescents. Individuals of this age group spend a lot of time at school, which provides high school teachers with opportunities to observe student behaviors. If teachers are able to determine that there are concerns with a student, they will be able to get help for the student. The research also showed that students in this age group are not getting access to the supports they need. There was thus a need to explore teacher characteristics that may be impacting the level of supports adolescents receive.

Chapter 2: Literature Review

Introduction

Symptoms of mental health problems often begin at an early age (Jorm et al., 2010), and as a result, children and adolescents are often dependent on adults to notice emerging issues (Jorm et al., 2010). Along with noticing the symptoms, children and adolescents are dependent upon adults to take action to address the symptoms (Jorm et al., 2010). Repie (2005) reported that approximately 40% of children in schools are at risk of not becoming successful adults due to either not being identified or not receiving services to address their symptoms. In order for children to obtain services, adults need to refer students to get help related to their mental health needs. The process by which they obtain the help was not part of this research study; I focused solely on the impact that personal attitudes toward mental health have on a teacher deciding to refer a student for services.

Specific variables such as the adolescent population, teachers, time in school, current interventions, and need for interventions are discussed in this chapter. Previous literature on decision making and how it may be influenced by personal attitudes is also presented in this chapter. All of these variables need to be addressed in relation to teachers making decisions to refer a student for services, specifically as they relate to symptoms of depression.

This chapter focuses on the previous literature and how teachers address mental health in the school setting. This study focused specifically on depression in the high

school setting. The prevalence of mental health issues in children leading to the prevalence of depression in adolescents is presented.

Literature Search Strategy

The literature search for this study focused on depression, adolescents, attitudes about mental health, and teachers. Additional searches were completed to obtain information on perceptions of and attitudes toward mental health. Searches were done to determine the impact of attitudes regarding mental health and teachers, yet there were limited to no data available. There were a lot of data available on teachers and mental health, yet many of these studies were focused on implementing interventions with teachers and in the school setting. A few additional studies were on teachers and identification as well as early identification. All of these studies are discussed in the literature review, leading up to the focus and need for the study.

The few studies that brushed upon the subject of teacher characteristics focused on variables such as years of teaching, gender, amount of education regarding childhood depression, personal experience with depression, and grade level (Auger, 2004; Loades & Mastroiannopoulou, 2010). Conclusions of other studies indicated that more in-depth studies are needed to focus on teacher characteristics, such as attitudes toward mental health. Having these data helped in gaining a better understanding of the decision-making process involved in referring students for services.

Theoretical Foundation

In reviewing the literature regarding the theoretical foundation, I found no studies in which social cognitive theory was applied to the manner in which attitudes drive

behavior with regard to teachers and referring students for mental health. There were articles on branches of cognitive theory and how they were used to address addiction and other diagnoses (Heydari, Dashtgard, & Moghadam, 2014; Webb et al., 2010), yet there were none relating to teachers and decision making. Most of the previous research conducted on the use of cognitive theory and behavior outcomes specifically targeted how attitudes impact mental health services and provisions of service for those with mental health needs (Shanley, 1981).

The basic tenet of cognitive theory is that behaviors, or actions, can be altered through evaluation of irrational thoughts or beliefs (Martin & Pear, 2007). First, *behavior* is defined as action (Martin & Pear, 2007). *Action* is the result of beliefs and ideas about a particular idea (Martin & Pear, 2007). Cognitive theory indicates that in order for behavior to change, there must be a change in thought (Martin & Pear, 2007). Using cognitive theory as the theoretical foundation for this study helped with the basic premise that teachers decide not to refer or decide to refer based on their personal beliefs and attitudes regarding mental health. Their beliefs and attitudes, in other words, are driving their actions. Given this understanding of the foundation of teachers' actions, the results of this study may help in determining the change in attitude or beliefs that needs to occur in order to help teachers refer students for help with their mental health needs.

Toshi and Eshbaugh (1976) discussed the idea of attitude leading to decision making. How a person feels about something leads to thoughts about the same thing, which eventually lead to decisions and actions regarding that something (Toshi & Eshbaugh, 1976). Understanding that attitudes lead to thoughts that lead to actions was

important to the process of this study. A teacher's attitude about mental health leads to certain thoughts about disorders and the students the teacher may encounter, ending with the teacher's decision to refer or not to refer.

Toshi and Eshbaugh (1976) also acknowledged a perspective similar to social cognitive theory in which beliefs and behavior are intertwined (Webb et al., 2010). Behavior is the result of personal experience and the learning that comes from that experience (Webb et al., 2010). Personal attitudes drive the behavior of referring an adolescent for services or not referring that adolescent for services, based on teachers' personal attitudes about mental health services. In gathering data on teachers' personal attitudes about mental health and using the results to determine how they responded to scenarios related to adolescent depression and their decision to refer, I used the theoretical foundation that Toshi and Eshbaugh (1976) and Webb et al. (2010) established, which indicates that the beliefs a person has lead to behavior.

A teacher's personal attitude about mental health leads to the decision to refer or the decision not to refer. Shanley (1981) indicated that one of the better ways to measure behavior in response to attitudes is the use of a Likert scale. Characteristics such as age, gender, education, and ethnicity (specifically related to culture) are also factors that can influence decisions (Midlarsky et al., 2012; Shanley, 1981; Weisz et al., 1991) and were part of the analysis in order to ensure that all variable were considered.

Literature Review Related to Key Variables/Concepts

Mental Health in Children

Individuals often experience symptoms of mental health issues for the first time during adolescence (Jorm et al., 2010). Statistics indicate that 10% of children in the school setting have a diagnosable mental health disorder and another 15% are at risk for developing symptoms related to a mental health diagnosis (Repie, 2005). Of the 10% who have been diagnosed, only 1-5% of these children are receiving services outside the school setting; less than one-half of these children are receiving services in the school setting through special education services (Repie, 2005). Repie (2005) also indicated that up to 40% of children are in need of some intervention yet do not receive help for their issues.

There is an overall lack of awareness about children with mental health disorders and needs (Hoven et al., 2008). This lack of awareness carries over to the level of understanding and intervention that can be provided to children with mental health needs (Hoven et al., 2008). Without adults who understand the need for interventions, children with mental health needs go untreated and are overlooked (Hoven et al., 2008). Hoven et al. (2008) went as far as to indicate that children with mental health needs are often misunderstood and that certain behaviors are attributed to issues of growth and development.

Prevalence of Adolescent Depression

Depression in adolescents under the age of 18 years is a very significant problem (Kirchner et al., 2001). Research has indicated that about one in four children will have a

depressive episode by 18 years of age (Renning, Haavisto, Nikolakaros, Helenius, Tamminen, Moilanen, ... Sourander, 2011), and of these one in four adolescents, one-third of them will continue to have depressive episodes beyond the age of 18 (Renning et al., 2011). The average age of onset for depression is 14.7 years of age in girls and 15.4 years in boys (Lewinson, Joiner, & Rohde, as cited in Bettes, Bullone, & Allen, 2009). Adolescents with depression are in need of identification during their high school years in order to ensure fewer symptoms beyond the age of 18.

Depression is the most underdiagnosed and undertreated mental health diagnosis among adolescents (Kirchner et al., 2001). If left untreated, symptoms can persist and increase, developing into other mental health concerns as individuals grow into adulthood (Kirchner et al., 2001). Societal costs, as well as personal costs related to depression and lack of treatment for the symptoms, become very great (Ronner et al., 2011). One way to remediate this cost is to determine how to better help the people involved with the adolescent population in identifying and referring them for services.

Loades and Mastroyannopoulou (2010) found that emotional disorders may appear to be less burdensome within the classroom setting due to students not acting out and internalizing behavior, in contrast to students who do act out, demanding immediate attention from the teacher. This may be a reason for teachers to focus their attention on externalizing behavioral issues in the classroom. This factor supports the fact that adolescents with depression are underdiagnosed and undertreated (Kirchner et al., 2001). Teachers are not looking for the student who has emotional concerns or symptoms of depression. Their focus is on the students whom may be disruptive in the classroom in

order to meet their academic goals for all of their students (Loades & Mastroyannopoulou, 2010). Girls are also more likely to exhibit symptoms related to mood disorders, anxiety, and somatic issues, whereas boys tend to exhibit more symptomology related to reduced drive and self-destructive behaviors (Modzejewska & Bomba, 2009). This does not mean that symptoms do not overlap; it simply means that there can be differences between sexes in the presentation of depression (Modzejewska & Bomba, 2009). Even though symptoms may present differently between boys and girls, symptoms are present. Students, both boys and girls, are not being referred for services often enough, regardless of how they present their symptoms.

Importance of Early Identification

Early identification is one method that researchers have determined can address and potentially decrease the level of severity of adolescent depression (Quiroga, Janosz, Bisset, & Morin, 2013). Early identification helps to avoid disruption and many negative consequences that adolescents may experience due to depression (Auger, 2004). Langeveld et al. (2011) indicated that there should be as little time as possible between identification of symptoms and the time services are received. The sooner an adolescent receives services, the fewer negative effects he or she will encounter (Langeveld et al., 2011).

Culture is another factor in early identification. Byrket and Young-Jones (2012) explored the impact of student]s' culture on depression. African American, Latin American, Asian American, and Native American students were included in the study, which indicated that adolescents in these populations had a greater risk of depression and

even major depressive episodes (Byrket & Young-Jones, 2012). Individuals within these groups of students are not receiving services, and this is the result of not of socioeconomic factors, but of social stigma (Byrket & Young-Jones, 2012). Adolescents are not receiving services they desperately need in order to overcome symptoms related to depression.

Adolescents who have depressive symptoms are more likely to struggle academically and have poor behavior in school, and they are at greater risk for completed suicide later in life (Loades & Mastroyannopoulou, 2010). Vogel (2012) conducted a study that concluded that early identification and intervention may reduce the impact of depression on all facets of an adolescent's life. Reduction of stress in the family, social, and academic settings is among the benefits of early identification and treatment for depression (Vogel, 2012). Adolescents with depression are also more likely to fail or drop out of school than those adolescents who do not have depression (Quiroga et al., 2013). Self-confidence, specifically linked with academic success and competence, is related to symptoms of depression (Quiroga et al., 2013). The key to averting negative effects is early intervention to address mental health needs (Quiroga et al., 2013).

Preparing adolescents for adulthood is one of the benefits of early intervention (Johnson, Eva, Johnson, & Walker, 2011). Interventions need to help an adolescent work through symptoms and have a higher chance of graduation and success after high school (Johnson et al., 2011). Approximately 70% of adolescents with mental health symptoms end up suffering through their symptoms, and 50% of those do not complete high school

(Johnson et al., 2011). Without early intervention, the prognosis is dismal, at best, for students who have symptoms of depression and do not get any intervention.

Adolescents who are identified as having depressive symptoms and are referred for services have a greater chance of working through the symptoms. Psychological therapy and/or antidepressant medication is effective in treating depression (Maughan, Collishaw, & Stringaris, 2013). Treatment effects are shown to be moderate (Maughan et al., 2013); however, these treatment effects are better than the experiences of adolescents who do not receive any services at all.

Intervention Effectiveness

Kirchner et al. (2001) conducted a study that focused on heightening awareness of depression in the school setting. Awareness was raised through a 1-day training session for teachers on symptomology and awareness of depression in the adolescent population (Kirchner et al., 2001). The outcome of this study indicated that there was an increase in teacher awareness of adolescent depression after the 1-day training; however, community factors may have influenced the teachers' retention and participation in the 1-day training (Kirchner et al., 2001). Another note Kirchner et al. (2001) made regarding limitations was that there was no measure of the personal attitudes of teachers before or after the training regarding mental health, and this would be useful to know. The manner in which teachers' personal attitudes regarding mental health impacted their performance and awareness after the 1-day training was unknown.

Jorm et al. (2010) conducted another study involving training teachers regarding mental health. Belief in the effectiveness of treatment was measured (Jorm et al., 2010).

The results indicated that after the training, teachers' beliefs about treatment effectiveness increased (Jorm et al., 2010). There is no measure regarding the overall attitude toward mental health that teachers exhibit, and further research is warranted into how overall attitudes toward mental health impact teachers' decisions to refer (Jorm et al., 2010).

Research has indicated that protective factors and early intervention can promote positive mental health rather than reducing the symptomology of depression in the adolescent participants (Rivet-Duval, Heriot, & Hunt, 2011). Positive mental health did not keep the symptoms of depression from occurring in the population that participated in the study (Rivet-Duval et al., 2011). This study indicates that teachers were responsible for providing the information to the study participants, and their presentation of the study and preintervention may have factored into the outcome (Rivet-Duval et al., 2011). The fact that teachers may have impacted the outcome based on their own attitudes lends to the need to explore teacher attitudes regarding mental health and how they impact intervention for adolescents with depression.

Spence, Sheffield, and Donovan (2005) conducted a study to determine the long-term effectiveness of prevention programs in the school setting. Their research indicated that there was no long-term benefit to the prevention programs provided by teachers in the school setting (Spence et al., 2005). The program they investigated was a short-term program in the school provided by teachers, and conclusions of their study indicated that this was not the most effective way to address depression in adolescents (Spence et al., 2005). The assumption can be made that the most effective way would be to help teachers

identify students with depression and then refer them for appropriate, effective services that would reap long-term benefits.

Time Spent in School

Adolescents spend so much time in school that Wong, Brinkworth, and Eccles (2013) even tried to determine the impact of teacher relationships as a protective factor in aggregate depression symptomology. Teachers can be an important person in a student's life, even more important in the process of identifying mental health needs of adolescents. The time adolescents spend in school make this setting ideal for identifying students who may be in need of mental health services (Reinke et al., 2011).

The amount of time an adolescent spends in school supports the role a teacher can play in identifying students with symptoms of depression. Teachers' supportive role in their student's life was researched to determine if this was a factor in decreasing symptoms of depression in students (Possel et al., 2013). Possel et al. (2013) concluded that it is not the teacher's supportive relationship role that decreases depression symptoms, either in the short term, or in the long term. There is more to the role of the teacher in addressing depression in adolescents. The significant amount of time adolescents are in school allows teachers the time needed to observe behaviors, and respond appropriately.

Role of Teacher

Teachers have been involved in the assessment of children with ADHD (Salmon & Kirby, 2009). There has been a high rate of success in teacher involved diagnosis, and intervention of students with ADHD (Salmon & Kirby, 2009). One reason that teachers

have had such a high rate of success with diagnosis, and intervention of ADHD is due to the externalizing behaviors related to ADHD (Loades & Mastroyannopoulou, 2010; Williams et al., 2007). Symptoms related to depression tend to be more internalizing, which teachers tend to overlook (Loades & Mastroyonnoloupou, 2010).

A study of teacher perceptions of needed mental health services resulted in teachers indicating they felt it was the role of the school to intervene, and support children with mental health needs (Reinke et al., 2011). The interesting factor is that teachers also noted they did not have the skills to support the children with mental health needs, and indicated they were equipped to teach academics, not address mental health needs (Reinke et al., 2011). Roeser and Midgley (1997) found that teachers felt burdened by the task of having to address mental health needs, on top of the academic task they already had. This warrants further exploration into their personal attitudes about mental health and how this impacts their decision to refer a student for support.

Schools are considered gateway providers of mental health services impacting the referral process for a student who may have symptoms of depression (Reinke et al., 2011; Williams et al., 2007). For this reason, this makes teachers one of the first people to notice symptoms, and refer the student to get help (Langeveld et al., 2011). If the teacher does not see the symptoms of the student warrant a referral for services, the student will not have access to services (Williams et al., 2007). A teacher's perception of mental health may impact their ability to identify a student exhibiting symptoms of depression.

Teachers reported they have difficulty with identifying any mental health concern (Loades & Mastroyannopoulou, 2010), let alone adolescent depression. Many adolescents

have symptoms of depression that will go undiagnosed and untreated (Trudgen & Lawn, 2011) due to teachers not recognizing the symptoms related to the depression. Teachers reported they felt they had a lack of training (Loades & Mastroyannopoulou, 2010), which kept them from identifying mental health symptoms in their students. Studies have suggested that even with training, there continues to be a lack of identification of internalizing behaviors and symptoms related to depression (Reinke et al., 2011; Williams et al., 2007). Reinke et al. (2011) even had teachers identify the school as the agency responsible for intervention in children and adolescents receiving mental health services if they needed them. This implied there are other factors that need to be explored as to why students who are exhibiting symptoms of depression are not being identified by teachers.

Mattison et al. (2007) completed a study to determine if teacher report forms were an accurate way for teachers to provide information on students. Teachers were found to be a reliable source of information, with very few false positives for clinical ratings of adolescent depression (Mattison et al., 2007). The important information to consider is that all of the ratings were in the clinical range, and yet, research continued to show that adolescent depression continued to be one of the most under-diagnosed mental health diagnosis (Kirchner et al., 2001). Other factors relating to the reasons teachers are not referring students for services needs to be explored.

Teachers are not fully aware of their role when it comes to children in their classrooms who present with symptoms related to depression (Repie, 2005). General education teachers and special education teachers both indicated that adolescent issues

related to depression were not significant. If teachers are not acknowledging issues related to depression as concerning, students will not be able to access services to address their mental health needs (Repie, 2005).

The most appropriate role for teachers in this setting is to recognize the problems their students may be having. Loades & Mastroyannopoulou, (2010) concluded that the most appropriate role for teachers in the classroom is to recognize the emotional problems their student may be having. The difficult part is teachers are not recognizing the problems, and students are not getting the help they need to address their emotional problems (Loades & Mastroyannopoulou, 2010). Teachers are an appropriately placed group that studies have shown have a desire to help with identifying students with mental health issues (Masillo, Monducci, Pucci, Telesforo, Battaglia, Carlotta, ... Girardi, 2011). The drawback is there is lack of knowledge related to mental health symptoms, particularly when the diagnosis involved more internalizing behaviors, and symptoms that are common in depression (Loades & Mastroyonnoloupou, 2010; Weisz et al., 1991). Teachers have admitted they are focused on behavior management, not identifying symptoms related to depression, and internalizing behaviors (Reinke et al., 2011; Williams et al., 2007). Determining teacher characteristics, specifically teacher attitudes about mental health, and how they play a role in the barriers to adolescents with depression receiving services is an area with no prior research.

Current Referral Process

There is no set, or standard, referral process that is consistent from state to state, or district to district. The type of training a teacher receives, as well as the types of

services offered to students, varies as well (Hans & Weiss, 2005). Most of the services available are based on certain values, and priorities that the individual school or district want to support (Hans & Weiss, 2005). The school or district must incorporate their process, or intervention, into current policies they have in place (Hans & Weiss, 2005). If the process, or intervention, does not, then there will not be long term effects, benefits or changes related to how students are referred or provided intervention (Hans & Weiss, 2005).

The complexity of the issue of intervention is that each school, or district, has their own process. Unless teachers are trained specifically on this process, there will always be difficulty with consistency in referring students for services (Hans & Weiss, 2005). This variable was not addressed in this current study due to such variability between schools, and districts. The focus was on whether the teacher will refer, and not the process by which they would go about for the referral process.

Teachers and Decision Making

In researching this topic of teachers, and decision-making, there was little research available. Most research was not related specifically to teachers and will be presented in the next category. In general, very little research existed regarding teachers, and decision-making, and no research related specifically to teacher decision-making about mental health referrals.

Hans and Weiss (2005) found that teacher's personal attitudes, and beliefs about an intervention implementation influenced their effort in complying with the intervention. If teachers personal attitudes, and beliefs about interventions influence the success of an

intervention, then exploring how personal attitudes impact their decision to refer needs to be determined. Appropriate training, and education is important to the success of interventions that are presented by teachers (Hans & Weiss, 2005). The education, and training helps address some personal attitudes, and beliefs teachers may have that impact the success of interventions (Hans & Weiss, 2005). If this is applied to the decision making process for referring a student, then, further evidence needs to be obtained through further research.

Impact of Perception/Attitudes on ID and Decision Making

Current studies of social attitudes continue to indicate negative views of mental health services, and those that obtain the services to treat mental health issues (Mori et al., 2007; Sadik et al., 2010). There are many factors that can impact attitudes regarding mental health, and the following review of the literature will serve to explore some current data on these factors. The factors identified are culture/ethnicity, age, and some other studies described that included gender, and even time or length of employment (teaching).

Midlarsky et al. (2012) conducted a study comparing different ethnic groups, some of which were from outside of the United States (US). Even though this study was partially conducted outside of the US, there is value in the information from the study as to the influence of culture on attitudes. Teachers in the US are from a variety of cultures, which impact attitudes of mental health and students they may encounter. The study concluded that participants from the US were not as open to psychotherapy and intervention as the European participants (Midlarsky et al., 2012).

In 2011, Dow and Wooley conducted a study that involved Albanian immigrants to the US. Religion as well as ethnicity was explored related to attitudes regarding mental health services, and openness to accessing services (Dow & Wooley, 2011). The study concluded that even though the participants had knowledge about mental health the symptoms that may be related to certain diagnosis, they shared there is shame, and stigma attached, and accessing support from professional psychologists is not something that is widely accepted (Dow & Wooley, 2011).

A study conducted in Australia regarding attitudes of mental health concluded that over 6000 participants age 15 and over, carried personal beliefs that impacted their perception of individuals with mental health needs (Reavley & Jorm, 2011). Specific attitudes regarding individuals diagnosed with schizophrenia, depression, and anxiety disorders were explored (Reavley & Jorm, 2011). Respondents indicated they would either not employing a person with mental health issues, to the reason a person has mental health issues is that a person is weak (Reavley & Jorm, 2011). This study could lend some insight to personal attitudes in the US in spite of being conducted in Australia.

Age is also a factor in attitudes regarding mental health services. Currin, Hayslip, and Temple, (2011) completed a study with data previously collected regarding mental health attitudes of older adults. Their hypothesis was that over time, the older adults had a more positive view of mental health and accessing services (Currin et al., 2011). The dates from the data were from 1977, 1991, and 2000 (Currin et al., 2011). The conclusions indicated there was not a positive change in mental health attitudes over the three points in time (Currin et al., 2011). Women were noted to have a higher level of

mental health biases than men, and the breadth of knowledge increased over time (Currin et al., 2011). A note should be made that in spite of the increased knowledge, openness to mental health services did not change (Currin et al., 2011).

Children's personal attitudes of mental health have been studied to determine their views and how this may impact their views when reaching adulthood (Wahl, Susin, Lax, Kaplan, & Zanita, 2012). Most studies were conducted with children outside of the United States (US), and may not necessarily be representative of children in the US. Wahl et al. (2012) completed their study within the US, and results indicated that approximately 62% of students would talk with a mental health provider if they needed to. A little over half of study participants indicated they would access mental health support, which means a little under half would not access services (Wahl et al., 2012). The study also concluded that the participants were generally pessimistic about the treatment outcomes for a person with mental health needs (Wahl et al., 2012). Approximately 33% of the children in the study felt a person with mental health needs would not benefit from treatment (Wahl et al., 2012).

If children carry their negative attitudes into adulthood, teachers are a part of this population. Carrying the same percentages from the study (Wahl et al., 2012) where a little under half of the teachers may have negative attitudes effecting referrals. The need for an exploration of teacher personal beliefs regarding mental health services is warranted. Understanding how these attitudes impact decisions to refer an adolescent for services who may exhibit symptoms of depression is important in order for students to receive services they need.

Research has indicated there may be teacher characteristics that impact their ability to identify symptoms related to depression (Auger, 2004; Mattison et al., 2007). Auger (2004) clearly identifies teachers as one of the adults that know the adolescent better than any other adult, aside from their parent(s). Auger conducted a study in which teachers were asked to rate students and their depression symptomology. Of five teachers, only one rated a student with symptoms related to depression (Auger, 2004). This is a very low number of students who are being identified, and not receiving the services they need to address their symptoms.

Williams et al., (2007) indicated that teachers have characteristics that limit their ability to identify their students' needs related to mental health. One characteristic is their length of time as a teacher (Williams et al., 2007). How long they have been working with the student population will impact their ability to identify symptoms. The longer a teacher is around certain age groups, they become more aware of the developmental norms for that group of students.

Teachers need to be able to identify symptoms of depression in order for early intervention. This relationship is important for positive long-term effects. Auger (2004) indicates further exploration into teacher characteristics needs to be examined in order to further understand how to better help teachers identify adolescents who exhibit symptoms of depression. Understanding this will help teachers refer students who may need help and providing them with early intervention. Teacher personal attitudes regarding mental health was explored to determine how this impacted their ability to identify symptoms of depression in adolescent students.

High school teachers work with the adolescent age group during a time this group of students is at higher risk of going through depression, and needs access to services (Loades & Mastroyannopoulou, 2010; Roeser & Midgley, 1997). If teachers have an attitude that mental health services are not effective, this may impact their perception that there is a problem for an adolescent exhibiting symptoms of depression. This implies a need for further exploration into teachers' perceptions of mental health, and how this impacts awareness of depression symptoms, and their likelihood of rating these symptoms as concerning. More specifically, what has been explored in this study is how high school teachers' personal attitudes regarding mental health services may be impacting their level awareness of the problem of adolescent depression, rating a student as needing services due to presenting behaviors.

Current Research on Teacher Attitudes Related to Decision Making

Teacher characteristics, specifically attitudes related to mental health, had not been explored. Auger (2004) conducted a study in which he looked at teachers' personal experience with depression, but nothing more in depth. All factors related to the aspects that relate to personal attitudes about mental health in teachers needed further study.

Jorm et al. (2010) conducted a study in Australia in which they concluded that social views of mental health were a factor in how teachers responded to their view of training for mental health awareness was effective. If social views of mental health impact their perception of training effectiveness, the question needs to be asked as to how teachers' personal attitudes about mental health impact their decision to refer a student

they are concerned about for mental health services. This is supported through Auger (2004) who identified teacher characteristics as a factor needing further research.

Loades and Mastroyannopoulou (2010) concluded their study with recommendations for future research to explore how teacher characteristics impact mental health. Gathering this type of data will help with developing appropriate training strategies to address issues related to personal attitudes about mental health (Loades & Mastroyannopoulou, 2010). This type of training will also help teachers understand the impact their personal attitudes about mental health have on their students who may have symptoms of depression.

Summary and Conclusions

There are a great number of adolescents in the school setting who are exhibiting symptoms of depression that are not getting help. Teachers have been shown to have knowledge about different diagnosis, yet they are better at identifying behaviors that are more related to externalizing behaviors. Depression in adolescents is typically internalizing, and teachers are not identifying these students at the rate depression is occurring.

Adolescents spend a great deal of their time in school. A teacher becomes a key player in early identification of adolescents in need of support for mental health services. Teacher characteristic have been identified as one way to understand why adolescents are not being referred. Prior studies only touched on characteristics, and further research was recommended to determine how they factor into mental health identification of children.

This study began to explore the relationship between teacher's personal attitudes about mental health, and how this impacted their decision to refer a student for services to address concerns regarding depression. Other factors such as age, gender, ethnicity, and years of teaching were also looked into in order to determine the relationship they had to their attitude as well as their decision to refer. This is the beginning of the process in order to determine the appropriate actions to take to improve the current situation of adolescents who have symptoms of depression and are not being referred for support. Early identification, and treatment for symptoms of depression have been shown to alleviate many life stressors for adolescents. This results in a more successful, and accomplished adult life.

Chapter three will outline all aspects of this quantitative study. High school teachers were asked to participate in a study involving the completion of a questionnaire designed to measure their personal attitudes about mental health. They were then asked to read scenarios of adolescents exhibiting symptoms of depression, and asked if "yes" they would refer the student for services, or "no" they would not refer the student for services. This information was analyzed to determine the relationship their attitude had to their decision to refer. Additional information was asked of the teacher such as age, gender, ethnicity, and the number of years they have been a teacher. This analysis helped recommendations regarding ways to help teachers identify adolescents with symptoms related to depression for early identification, and intervention.

Chapter 3: Research Method

Introduction

Symptoms of mental health problems often begin at an early age (Jorm et al., 2010), and as a result, children and adolescents are often dependent on adults to notice emerging issues (Jorm et al., 2010). Along with noticing the symptoms, children and adolescents are also dependent upon adults to take action to address the symptoms (Jorm et al., 2010). Repie (2005) reported that approximately 40% of children in schools are at risk of not becoming successful adults due to either not being identified or not receiving services to address their symptoms. In order for children to obtain services, adults need refer students to get help related to their mental health needs. The process by which they obtain help was not part of this research study; I focused solely on the impact of personal attitudes toward mental health on a teacher's decision to refer a student for services.

This chapter focuses on the research design and methods used to obtain the data for this study. The population that was targeted, along with how the sample population was obtained, is outlined in this chapter. The tools used to measure teacher attitudes toward mental health as well as the scenarios are outlined and described in this chapter. Threats to the validity of this study are identified and explained, as well as any ethical concerns for the completion of this study. This chapter ends with a summary in which all major components of this study are outlined and concluded.

Research Design and Rationale

This study was quantitative, with the use of a questionnaire completed by high school teacher participants. The questionnaire gathered information on the teachers'

personal beliefs regarding mental health services. Teachers were also asked to provide information regarding their years of teaching, years of education, gender, and ethnicity. This information was used in a discriminant analysis in order to determine the impact any of these had on the findings of the study. This demographic information was needed to determine how each of these factors impacted teachers' personal attitudes about mental health. Understanding this information helped to ensure that the most accurate data were collected to determine how best to address this issue in the future.

The second part of data collection involved teachers being presented with scenarios. These scenarios were used to assess how teachers responded to a student with depression symptoms. The teachers needed to read through scenarios to determine whether they would refer for further support ("yes") or would not refer for further support ("no"). This information was then used to determine whether teachers' personal beliefs, and then other related factors, impacted their decision to refer a student for services.

The dependent variable that was measured was the high school teacher's decision to refer a student for mental health services specifically related to depression. The independent variable was the teacher's personal beliefs regarding mental health services. Demographic factors and their relationship to teachers' attitudes related to mental health were also explored. Demographic factors that were explored were age, years of teaching, gender, ethnicity, and years of education, in order to determine if any of these affected teachers' personal beliefs on mental health.

For this study, multiple regression analysis was used to determine whether there was any relationship between the dependent variable and the independent variable. When

considering the demographic factors and their relationship to the teachers' decision to refer, the most appropriate way to measure how the variables (age, gender, ethnicity, years of teaching, and years of education) predicted teacher attitudes was through multiple regression analysis and the use of "dummy variables." The *F* ratio was used to measure a person's characteristic pattern, specifically how teacher characteristics impact attitudes about mental health leading to the decision to refer or not (Shanley, 1981). Providing this analysis allowed further exploration into demographic factors, their impact on personal beliefs about mental health, and how they may impact a teacher's decision to refer a student for services.

As outlined in Chapter 1, the hypotheses for this study were as follows:

Null Hypothesis (H0) 1: Higher scores on personal attitude toward mental health services in the area of psychological openness will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 2: Higher scores on personal attitude toward mental health services in the area of help-seeking propensity will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 3: Higher scores on personal attitude toward mental health services in the area of indifference to stigma will result in teachers not referring a student for services ("no").

Null Hypothesis (H0) 4: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference

to stigma, when placed in years of age groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 5: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in gender groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 6: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in ethnic groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 7: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of teaching groups, will result in teachers not referring a student for services (“no”).

Null Hypothesis (H0) 8: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of education groups, will result in teachers not referring a student for services (“no”).

Research Hypothesis (H1) 1: Higher scores on personal attitude toward mental health services in the area of psychological openness will result in teachers referring a student for services (“yes”).

(H1) 2: Higher scores on personal attitude toward mental health services in the area of help-seeking propensity will result in teachers referring a student for services (“yes”).

(H1) 3: Higher scores on personal attitude toward mental health services in the area of indifference to stigma will result in teachers referring a student for services (“yes”).

(H1) 4: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of age groups, will result in teachers referring a student for services (“yes”).

(H1) 5: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in gender groups, will result in teachers referring a student for services (“yes”).

(H1) 6: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in ethnic groups, will result in teachers referring a student for services (“yes”).

(H1) 7: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of teaching groups, will result in teachers referring a student for services (“yes”).

(H1) 8: Higher scores on personal attitude toward mental health services in the areas of psychological openness, help-seeking propensity, and indifference to stigma, when placed in years of education groups, will result in teachers referring a student for services (“yes”).

Multiple regression and F ratio were used to determine the impact of the dependent variable on the demographic factors (i.e., gender, ethnicity, age, years of teaching, and years of education). Using this analysis, I determined the relationship between the dependent variable and the different groups within the independent variable. This further analysis helped to determine other characteristics that high school classroom teachers have that could impact their decisions to refer a student for services related to symptoms of depression.

Methodology

Population

The population for the research was 92 high school teachers identified through the Survey Monkey database, all of whom were from the United States. All 92 participants were anonymous. All participants indicated that they met the inclusion criterion of being a high school teacher. The educators were then provided a link to the survey and questions through Survey Monkey, where all data were submitted.

Sampling and Sampling Procedures

The sampling strategy used for this study was nonprobability sampling. This was due to the inclusion criterion (i.e., participants needed to be high school classroom teachers). This criterion was necessary in order to ensure that participants could provide

information relevant to the research question, which pertained to teachers' personal beliefs regarding mental health services.

Because this study used nonprobability sampling, an inclusion criterion was used. Any participant in this study had to have the title of a classroom teacher, whether in general education or special education. No teacher's aides or assistants were considered for participation in this study.

Sample Size

An a priori sample size for multiple regression analysis was completed using Statistics Calculators (www.danielsoper.com/statcalc3/calc.aspx?id=1). This calculator indicates that for an anticipated medium effect size, 0.15, with a desired statistical power level of 0.8, and an alpha level of 0.05, with five subgroups, the minimum sample size is 91. This study had five subgroups (age-continuous, gender-category, ethnicity-category, years of teaching-continuous, and years of education-category).

The most appropriate sample size for testing the hypotheses and using discriminant analysis was 91. The most appropriate sample size for this study, focusing on correlational information, with regression was 91. The recommended sample size was sufficient for obtaining the necessary data to either accept or reject the null hypotheses. The sample size obtained for this study was 92.

Procedures for Recruitment, Participation, and Data Collection

All 92 participants were recruited through Survey Monkey, which sent a recruitment email to individuals listed in its database of educators. The 92 participants

were invited to take the survey once they met the inclusion criterion of being a high school teacher.

Demographic factor information that was asked of the participants consisted of their gender, ethnicity, years of teaching, and years of education. This was included in the survey link that participants were provided in the recruitment email. This demographic information was needed to determine the relationship of these factors and their impact on teachers' personal attitudes about mental health services. Understanding this information helped to ensure that the most accurate data were collected in order to determine how best to address this issue in the future.

Data collection occurred through Survey Monkey. A link to the questionnaire on Survey Monkey was provided to each teacher through email. Once participants answered and submitted the survey, the data were uploaded into Survey Monkey and then transferred to SPSS for analysis. The demographic information was also uploaded and available for analysis through SPSS.

Included in this email was a letter that provided participants with information on informed consent. At the conclusion of the email letter was information on exiting the study. This information included my contact information and my committee members' information in case there were any questions regarding the survey or study.

Instrumentation and Operationalization of Constructs

The inventory used for this study was the Inventory of Attitudes Towards Seeking Mental Health Services (IASMHS). This 24-item attitude measure was developed by MacKenzie, Gekoski, and Knox (2004), and the purpose for creating this measure was to

update the only scale in existence that measured attitudes a person has toward seeking mental health services (Fischer & Turner, 1970). Updating this scale also increased its reliability and validity by adding items to assess norms and perceived behaviors related to seeking mental health services. This measure is supported by Ajzen's (2011) theory of the prediction of behavior and behavior intention from attitudes. The use of this scale did not require permission.

IASMHS consists of three subscales, Psychological Openness, Help-Seeking Propensity, and Indifference to Stigma. The alpha coefficients for each of these subscales range between 0.76 to 0.82. The internal consistency for the full scale is 0.87. This scale has been used in studies with college students to determine their attitudes about mental health and whether they would seek services if they had any mental health concerns (Mackenzie et al., 2006). This scale was also used in a study in which members of the general population, both men and women, of all backgrounds were asked to complete the scale to determine their likelihood of seeking professional help for any mental health concerns they might have (Mackenzie, 2000). Independent studies conducted using this scale have proven to be valid and supportive of the information being requested through the IASMHS scale. Loya, Reddy, and Hinshaw (2010) used the IASMHS scale to look into stigmas related to mental health diagnosis and how ethnicity plays into these stigmas. Another study conducted by Munson, Floersch, and Townsend (2009) used the IASMHS scale to determine mental illness perceptions among adolescents who had mood disorders. This scale has assisted in determining the various impacts that personal attitudes and beliefs may have on different factors related to the stigma of diagnosis as

well as obtaining mental health services.

The vignettes that were used for this study were created based on the DSM-V depression criteria. Each scenario involved an adolescent-aged student of unspecified gender. The teachers were provided at least two scenarios in which they needed to conclude that “yes” they would refer, or “no” they would not refer the student for services. These scenarios had not been used in any prior study. The use of scenarios to gather data on how a person may view information was appropriate in this study to help in understanding teacher decision making. Loades and Mastroiannopoulou (2010) used vignettes/scenarios with teachers to determine how accurately they would identify certain symptoms and diagnoses. Because this study was focused on decision making and involved the use of scenarios created using the DSM-V diagnosis, with accurate symptoms related to depression, the only focus in presenting these scenarios/vignettes was determining a referral decision from the teacher.

Threats to Validity

With data collection conducted through a survey method, the teachers submitted information anonymously. There was a concern that participants might not be high school classroom teachers. This threat was easily addressed by asking whether the participant was a high school teacher on the first question of the survey. If the participant was a high school teacher, he or she was allowed to continue and complete the survey. If the participant was not a high school teacher, the survey was not presented to him or her. This ensured that the participants were high school teachers.

When using self-report forms, such as the tool used for this study, there is always the concern of a person rating themselves in a better light, or based on what they believe they are supposed to answer. The tool used for this study was shown to be valid in measuring personal attitudes of mental health. This threat is addressed through the information provided on the instruments reliability and validity.

Ethical Procedures

Information related to all participant names were not known to the researcher, and remained confidential throughout the study. When participants completed the study through Survey Monkey, they were assigned a participant number with no identifying information linked to participant personal information. This ensured that all names of participants remained anonymous and confidential.

All surveys completed were completed through Survey Monkey. Once the data were submitted for all needed participants, the data were directly uploaded into SPSS. This ensured that the information was correct and there were no transcription errors with inputting the data into SPSS. This also ensured that participant information remained confidential and no change of data privacy being released.

Once the data were uploaded into SPSS, the data set were stored on a flash drive. This flash drive is in a locked file cabinet when not being analyzed. The researcher has the only key to the file cabinet, which ensures the data are not changed or manipulated to keep the data pure and free from error. This preserves the original information from the participants in this study.

Recruitment was by nonprobability sampling due to the nature of the study being a survey and demographic information. This was based on the exclusion criteria for the participants in this study. Teachers, both special education and general education teachers were required to meet criteria for inclusion in this study.

Summary

The design for this study was the use of a survey with a nonprobability sampling for the population. The population came from Survey Monkey, and their database of educators who needed to accurately respond to the inclusion criteria of being a high school teacher. This population was within the United States. The participants were 92 high school classroom teachers, both special education and general education teachers. This approach was the best way to gain information from teachers regarding their personal attitudes regarding mental health services and how this impacted their decision to refer a student for services.

The data obtained were anonymous, and were kept private in order to ensure data integrity. This researcher is the only one to access, and analyze the data obtained for this study. Ensuring confidentiality, and data integrity produced the most reliable outcome data for analysis and research conclusions.

Chapter 4: Results

Descriptive Statistics

The purpose of the current study was to investigate the help-seeking attitudes and personal beliefs of teachers. To address these questions, simultaneous regression analysis was conducted to predict relationships between variables of interest, namely the predictor variables (age, gender, ethnicity, years of teaching, and years of education) and the criterion variables (attitudes toward seeking help and professional concerns about seeking help). This chapter provides a description of the findings associated with the overall five-predictor model for the criterion variables being investigated in the study.

Demographics of the Sample

The study included a total of 92 participants who were high school teachers. The sample was taken within the United States and within the required criteria indicated in Chapter 3. The regions in which the 92 participants were located in within the United States were not known. Additionally, the nature of the participants' locations in terms of being urban, suburban, or rural was not known. Tables 1-5 provide information about the 92 participants and the demographic information included in this study. Age, gender, years of education, ethnicity, and years of teaching are reflected in the tables.

Table 1

Demographic Information of Participants—Gender

Gender	Total number	Percentage
Total participants	92	100
Male	27	29
Female	65	71

Table 2

Demographic Information of Participants—Age

Age	Total number	Percentage
Age 20-29	12	13
Age 30-39	26	28
Age 40-49	27	29
Age 50-59	16	18
Age 60-65	11	12

Table 3

Demographic Information of Participants—Ethnicity

Ethnicity	Number	Percentage
Asian or Pacific Islander	7	8
Black or African American	13	14
Hispanic	8	9
Caucasian	64	69

Table 4

Demographic Information of Participants—Education

Degree level	Number	Percentage
Bachelor's degree	44	48
Master's degree	47	51
Doctorate	1	1

Table 5

Demographic Information of Participants—Years Teaching

Years teaching	Number	Percentage
0-5	18	20
6-10	30	33
10-15	17	18
15-20	11	12
20+	16	17

Preliminary Findings

Preliminary findings were obtained in order to test for the following assumptions underlying multiple regression. The assumptions of multiple regression are that the relationship between the variables will be linear and that there is multivariate normality, no or little multicollinearity, no autocorrelation, and homoscedasticity. Frequency distributions were obtained for unstandardized residuals from the criterion variables from the IASMHS (Inventory of Attitudes Toward Seeking Mental Health Services; measures of help-seeking attitudes): psychological openness, help-seeking propensity, and indifference to stigma (Mackenzie, 2000). This examination indicated normal distribution of residuals for all variables. Examination of the standardized residual plots depicting the expected values and the observed values for the criterion variables being investigated provided further support for pursuing data analysis. Additionally, examination of the scatterplots of residual values for all five criterion variables provided evidence that the relationships being investigated were linear, and that the error variance was similar across levels for the criterion.

Finally, to assess for issues of multicollinearity (which could lead to errors in estimating regression coefficients and thus cause issues in interpreting the results of data analysis), tolerance and VIF values were obtained and analyzed. These values indicated that the data met the assumption of collinearity without any multicollinearity concerns (i.e., VIF values were greater than 10 and tolerance levels were less than 1.0). These results are illustrated in Table 6.

Table 6

Multicollinearity: Tolerance and VIF

Predictors	Tolerance	VIF
Gender	.986	1.015
Age	.601	1.665
Ethnicity	.980	1.020
Highest level of completed education	.977	1.024
Years of teaching	.593	1.685

Research Questions and Hypotheses

In the following section, the research questions are presented, and related hypotheses and findings are included as they relate to each question. *F*-ratio analysis was conducted in order to determine the impact of predictor variables (psychological openness, help-seeking propensity, and indifference to stigma) on a teacher's decision to refer a student for services. Multiple regression analysis was conducted whereby predictor variables (age, gender, ethnicity, years of teaching, and years of education) were entered simultaneously into the model to determine any unique contribution any of

these predictor variables may have had in the three areas explored (psychological openness, help-seeking propensity, and indifference to stigma).

Research Questions 1, 2, and 3

F-ratio analysis was completed to answer additional questions related to the direct impact of psychological openness, help-seeking propensity, indifference to stigma, and participants' actual responses to two different scenarios related to adolescent depression. This analysis provided data to determine relationships between groups and within groups relating to the three categories of results from the survey, and how each of those related to participants' responses to the two different scenarios.

The first *F*-ratio analysis provided information suggesting no significant relationship between the total IASMHS score, psychological openness, help-seeking propensity, and indifference to stigma and each participant's response to Scenario 1. All data are presented below in Table 7.

Table 7

F-Ratio Analysis: Total IASMHS Score

Variable	SS	<i>Df</i>	MS	<i>F</i>	Sig
Total IASMHS score	.179 11051.691	1 90	.179 122.797	.001	.970
Psychological openness	54.763 4123.791	1 90	54.763 45.820	1.195	.277
Help-seeking propensity	29.607 1012.306	1 90	29.607 11.248	2.632	.108
Indifference to stigma	5.374 2685.104	1 90	5.374 29.834	.180	.672

The second *F*-ratio analysis provided support for the significant results in the indifference to stigma category and response to the second scenario, $F(1, 90) = 5.395$, $p = 0.022$. MS error = 28.204, $\alpha = .05$. The results indicate that the participants' responses to survey questions relating to indifference to stigma made a significant unique contribution to the prediction of their response to Scenario 2. This represents a medium effect size for Scenario 2 of indifference to stigma. Results for the Scenario 2 variable and its relationship to indifference to stigma are presented in Table 8.

Table 8

F-Ratio Analysis: Indifference to Stigma

Variable	SS	<i>Df</i>	MS	<i>F</i>	Sig
Total IASMHS score	357.217	1	357.217	3.006	.086
Psychological openness	10694.652	90	118.829		
Help-seeking propensity	8.373	1	8.373	.181	.672
Indifference to stigma	4170.182	90	46.335		
	13.261	1	13.261	1.160	.284
	1028.652	90	11.429		
	152.156	1	152.156	5.395	.022
	2538.323	90	28.204		

All of the other categories (psychological openness, help-seeking propensity, as well as the total overall IASMHS score) were not significant.

Research Questions 4 and 5

The fourth research question asked how teachers' perceptions of mental health may impact their decision to refer a student for mental health services and how characteristics such as age, gender, ethnicity, years of education, and years of teaching

impact their perception and decision. Specifically, their openness to psychological services was explored.

Multiple regression analyses provided support for the first hypothesis, with high psychological openness scores predicting a teacher referring a student; $F(5, 86) = 2.488$, $R^2 = .126$, $p < .05$) when age ($\beta = 1.516$, $t = 2.075$, $p < .05$) and gender ($\beta = -3.336$, $t = -2.220$, $p < .05$) were considered. The results indicated that the overall model accounted for 12.6% of the variance in psychological openness. The results from the model pointed to the predictor variables of age and gender specifically as making significant unique contributions to the prediction of psychological openness when all other variables were controlled for in the model (answering the fourth and fifth hypotheses). This represents a medium effect size for both gender and age of psychological openness. Results for each predictor variable and its relationship to psychological openness are presented in Table 9.

Table 9

Predictors: Psychological Openness

Variable	B	Se B	B	T
Gender	-3.336	1.503	-.2255	2.220**
Age	1.516	.731	.270	2.075**
Ethnicity	.469	.693	.069	.676
Highest education level	1.947	1.321	.150	1.473
Years of teaching	-.844	.646	-.171	-1.306

** $p < .05$

Research Question 6

The sixth research question asked how teachers' perceptions of mental health may impact their decision to refer a student for mental health services and how characteristics such as age, gender, ethnicity, years of education, and years of teaching impact their perception and decision. Specifically, for this fifth question, teachers' likelihood of seeking mental health services (help-seeking propensity) was explored.

The results of the multiple regression analyses were not significant for help-seeking propensity; $F(5, 86) = .225$, $R^2 = .013$, $p = .95$). The results indicate that the overall model accounted for 1.3% of the variance in help-seeking propensity. Results for each predictor variable and its relationship to help-seeking propensity are presented in Table 10.

Table 10

Predictors: Help-Seeking Propensity

Variable	B	Se B	B	T
Gender	.695	.798	.094	.871
Age	.126	.388	.045	.326
Ethnicity	.191	.368	.056	.520
Highest education level	-.059	.701	-.009	-.084
Years of teaching	-.029	.343	-.012	-.085

$p < .05$.

Research Questions 7 and 8

The last two research questions asked how teachers' perceptions of mental health may impact their decision to refer a student for mental health services and how

characteristics such as age, gender, ethnicity, years of education, and years of teaching impact their perception and decision. Specifically, for these questions, teachers' indifference to the stigma related to seeking mental health services was explored.

Multiple regression analyses did not provide support for this model predicting help-seeking by indifference to stigma; $F(5, 86) = .1253, R^2 = .068, p = .292$). The results indicate that the overall model accounted for 6.8% of the variance in indifference to stigma. Results for each predictor variable and its relationship to indifference to stigma are presented in Table 11.

Table 11

Predictors: Indifference to Stigma

Variable	B	Se B	B	T
Gender	-.230	1.245	-.019	-.185
Age	1.197	.605	.266	1.977
Ethnicity	-.368	.575	-.067	-.641
Highest education level	.326	1.095	.031	.298
Years of teaching	-.091	.536	-.023	-.170

** $p < .05$.

Research Question 9

Multiple regression analysis was used to test whether high scores on the IASMHS, when placed in age, gender, ethnicity, years of teaching, and years of education groups, predicted a teacher referring a student for services. The results of the regression indicated that the five predictors explained 9.2% of the variance ($F(5, 86) =$

.1.738, $R^2 = .092$, $p = .135$). It was found that age significantly predicted a teacher referring a student for services ($\beta = 2.818$, $t = 2.326$, $p < .05$).

Further Analysis

After the multiple regression analysis was conducted, age and gender were further analyzed through multiple regression to determine their direct impact on teachers' decision to refer (in their specific responses to Scenarios 1 and 2). Results indicated that there was no significant direct relationship between age and gender and the individuals' responses to either Scenario 1 ($F(2,89) = .953$, $R^2 = .021$, $p = .390$) or Scenario 2 ($F(2,89) = 1.689$, $R^2 = .032$, $p = .191$). Results of the analysis (age/gender and Scenario 1—Table 12, and age/gender and Scenario 2—Table 13).

Table 12

Scenario 1

Variable	B	Se B	B	T
Gender	-.027	.039	-.072	-.690
Age	-.120	.103	-.123	-1.174

** $p < .05$.

Table 13

Scenario 2

Variable	B	Se B	B	T
Age	-.017	.023	-.077	-.737
Gender	.103	.061	.177	1.705

** $p < .05$.

Summary and Conclusions

The analysis of the data obtained in this study indicates that there is a relationship between the age and gender of a teacher and his or her psychological openness (an individual's openness to acknowledging psychological problems and seeking professional help for them—see definitions in Chapter 1), as well as age and a high overall score on the IASMHS. Further analysis was completed to determine how each category in the IASMHS (psychological openness, help-seeking propensity, and indifference to stigma) directly related to each teacher's decision to refer and whether this relationship was significant. The results indicated that there was a relationship between the decision to refer, specifically in Scenario 2, and indifference to stigma.

Further implications and considerations for future research are explored in Chapter 5. More specific considerations are identified and discussed in Chapter 5 as well. The implications for change as a result of the research results are also explored, specifically related to how this information can be applied to bring about social change.

Chapter 5: Conclusion

Introduction

Adolescents have a high rate of untreated mental health issues, specifically related to depression. High school teachers are not aware of adolescent depressive symptomology in order to refer students for services to address symptoms related to depression, which results in students experiencing increased mental health issues into adulthood. Understanding specific characteristics teachers have that impact their decision to refer was the focus of this study. Specifically, teachers' beliefs about mental health, as well as their age, gender, ethnicity, years of education, and years of teaching were analyzed to determine the impact each these characteristics had on their decision to refer a student for services.

High school teachers across the United States participated in this quantitative study. The teachers who participated completed a survey and answered "yes" or "no" to case presentation as to whether they would refer the student for services. This information was analyzed through multiple regression and descriptive analysis to determine the relationship these characteristics had with their decision to refer.

The data indicated that the relationships of age and gender with psychological openness, as well as age with overall attitudes toward mental health, were significant. Data also showed that the higher a teacher's score was for attitude related to indifference to the stigma of mental health, the more likely the teacher was to refer the student in Scenario 2.

Interpretation of the Findings

This study provides information that may help with identifying beliefs that are driving behaviors. Martin and Pear (2007) indicated that behaviors are the results of actions; actions are the result of beliefs. Having the information provided in this study related to teachers' beliefs and how these beliefs impact their decision to refer a student for supports may assist in developing training for teachers that helps them become more aware of the beliefs that impact their decisions to refer students for support. Toshi and Eshbaugh (1976) also determined that how a person feels about something will eventually lead him or her to make decisions based on these feelings.

Teachers are making decisions to refer students, or not to refer students, based on their psychological openness and indifference to stigma. The data from the current study indicated that the more open a teacher was to mental health services, the more willing he or she was to referring a student for services. The data also indicated that the more negative a teacher's feelings were regarding the stigma of mental health services, the more likely the teacher would be not to refer a student for services.

Previous research indicated teachers' attitudes about mental health needed to be explored in relation to how they impacted their decision making (Hans & Weiss, 2005). This study supports the conclusion that teachers' decision making is impacted by their attitudes related to mental health. The significant data related to the teachers' beliefs directly impacted their decisions to refer or not refer. The data from this study indicate that personal attitudes of teachers related to mental health are driving their decisions related to adolescents who may benefit from services.

Previous literature also indicated that characteristics such as gender, age, education level, and ethnicity can also impact personal attitudes and beliefs, which result in certain decisions (Midlarsky et al., 2012). The data from this study confirmed that the age and gender of the teachers did impact their responses and decisions to refer a student for services. The age and gender of teachers directly impacted their scores related to psychological openness, and the age of the teachers impacted their overall total score on the scale presented.

Implications

This study provided great information related to some factors that play a role in the decision-making process related to referring a student for services. Age and gender are factors that cannot be controlled. The knowledge that these are factors in how a teacher decides to refer a student for services will assist in heightening awareness and attempting to alleviate biases that can affect a student's access to services. Hans and Weiss (2005) concluded that training helps in addressing some personal attitudes and beliefs. Educating teachers on the role that characteristics such as age and gender can have in their decision making would be important in heightening awareness of referral decision practices.

Previous research indicated that teacher training related to heightening awareness of depression in the school setting did increase teacher awareness of students and depressive symptomology (Kirchner et al., 2001). Jorm et al. (2010) conducted a study related to teacher training that measured the teacher's belief in treatment effectiveness. This study did not address training related to overall mental health beliefs and how this

may impact teachers' decision making. The current study indicates that teachers are influenced by their personal beliefs related to mental health and referring a student for services. These results contribute to the need to address this component within a training to heighten teachers' awareness of how their personal beliefs can impact their decision making related to referring a student for services.

This study confirms previous research conducted by Currin et al. (2011), which found age to be a factor in personal attitudes related to mental health services. Currin et al. also concluded that gender was a factor in personal attitudes related to mental health. The findings from this study are consistent with prior research and should be considered in any training related to teacher awareness of factors that may impact their identification of students with depressive symptomology, especially given the finding of the current study that age and gender influence teachers' decision making related to referring a student for services.

Educating teachers on the impact that their feelings related to mental health services has on the decisions they make about referring a student for services is supported through this research and previous research. The data from this study show that teachers' openness to mental health services and feelings on the stigma related to mental health are impacting their decisions to refer students for services. If teachers are educated and aware of the specific beliefs and attitudes that impact their decision making, this may lead to a change in beliefs, leading to a higher number of students being referred for mental health services.

Another area in which this study may be helpful is streamlining the referral process. If teachers are trained in a consistent manner, there should be a consistent referral process for teachers to use on behalf of students who may need mental health services. Prior research has indicated that individual school districts create their own processes for referring students for services (Hans & Weiss, 2005). Having basic requirements for the process of referral would alleviate any questions regarding how teachers need to refer a student if they recognize any symptoms that may be addressed with mental health services. Including this information in the overall training for teachers related to referring a student for services would be beneficial in ensuring that students have access to mental health services.

Positive Social Change

Information from this study could help teachers understand that their age, their gender, their indifference to stigma, and their psychological openness impact their decisions to refer students for services. This is consistent with additional research completed by Toshi and Eshbaugh (1976) indicating that a person's attitudes lead to decision making. Social change may occur with greater awareness of the impact that variables such as age and gender have on teachers' decision making related to helping students access mental health services.

Teachers' personal beliefs, as manifested in indifference to stigma and psychological openness, were identified as having a direct impact on their decision to refer a student for services. These areas (indifference to stigma and psychological openness) are directly related to personal experience. Webb et al. (2010) found that

personal experiences and beliefs are related to how an individual makes decisions.

Awareness of how personal experiences and beliefs impact teachers' behavior may also bring about social change.

Because there has been minimal research related to how teachers' attitudes and beliefs impact their decisions to refer students for services, this study may help with educating teachers on biases in order to change how they decide to refer students for services, in conjunction with current research related to effective teacher training components. Previous studies indicated that teachers' attitudes and beliefs impacted their compliance with interventions but did not address how these attitudes and beliefs impacted their decision to refer a student for services. With the conclusions from this study, educating teachers on their personal biases related to beliefs and attitudes, as well as how their age and gender may impact children receiving services for depressive symptomology, will be critical for making a difference in children's lives by providing them access to needed mental health services. This is consistent with teachers' attitudes impacting their decisions to refer students for services.

Streamlining district referral processes for students exhibiting symptoms related to depression would assist in increasing the number of children who have access to mental health services. Prior research indicates that the more children have access to services, the more likely they are to remedy their symptoms and have fewer negative effects (Langeveld et al., 2011). Effectively and positively meeting the mental health needs of children will result in positive social change, with individuals experiencing fewer mental health related issues as they grow into adulthood.

Limitations of the Study

For the current study, I recruited 92 high school teachers across the United States. One limitation of this study was the limited numbers of participants within the multiple demographic groups. Specifically, the demographic groups that would benefit from further study are Asian, Hispanic, and African American/Black high school teachers. Additionally, there was only one participant with a doctorate; further research involving participants with doctoral degrees may provide additional data. The data for this study were sufficient for analysis, yet with a larger population sample, there might be more specific results. It may be beneficial to explore the impact of these demographics with a larger population sample.

The sampling for this study may not have addressed all factors related to the impact of region on teacher responses. This study did have the number needed for effect size, yet it would be beneficial to have a larger sample from a broader population of teachers from all regions within the United States. Another area to consider is where teachers are located relative to cities. Whether teachers lived in rural, urban, or suburban areas may have impacted their responses and may need further exploration through additional research.

This study may also have been limited in the scope of the specific questions related to the study. There might have been a benefit in completing a qualitative portion in this study to gather more specific information from teachers regarding the factors that contributed to their decisions to refer. Factors that teachers may not be aware of were determined from this study; however, in interviews, other factors might have come to the

surface to assist with a deeper analysis in order to gather well-rounded data related to high school teachers' decision to refer a student for services.

One other limitation of this study was the implication that limited mental health services may factor into a teacher referring a student for services. There is such a wide variety of services available from city to city, district to district, and state to state. Further studies would benefit from determining how this variability factors into a teacher's decision to refer a student for services.

Recommendations

The current study confirms that there are factors related to beliefs and personal experiences that impact a teacher's decision to refer a student for services. More specifically, age, gender, psychological openness, and indifference to stigma were found to be significant in teachers' decision-making process related to referring a student for services. Previous literature indicated that trainings are effective in heightening teacher awareness related to depressive symptomology (Kirchner et al., 2001); it may also be helpful to include education on how age, gender, and personal beliefs related to mental health factors can influence teachers' decision making. Including these components in current teacher training would be a great way to help with ensuring that more adolescents are being referred for services when their behavior indicates a need.

Prior research indicated that education and training help in addressing some personal attitudes and beliefs (Hans & Weiss, 2005). Education and training on how age, gender, psychological openness, and indifference to stigma impact teachers' decision making may be beneficial. Future research should be conducted with teachers to

determine the level of success this type of education and training has in improving decision making and the referral process.

This study may also promote teachers becoming more aware of factors that may hinder them from identifying a student in their classroom who has depressive symptoms. Educating educators on how their own beliefs on mental health services and other factors related to their age and gender impact their decision making and referrals of students for services may help in increasing early identification of students with depressive symptoms. Early identification has been noted as a way to address and potentially decrease the level of severity of adolescent depression (Quiroga et al., 2013).

The current referral process is not something that is streamlined from school to school, district to district, or state to state. There is a need for a more consistent training process for teachers related to identifying depressive symptomology in their students, as well as a need to inform teachers of the factors that may hinder their own ability to identify this symptomology. Hans and Weiss (2005) indicated the importance of training teachers on the referral process, including how teachers' beliefs impact their decision-making process, in increasing understanding and awareness concerning the complexity of identification of depressive symptomology in students.

Conclusion

This study has provided information that may be valuable in future trainings with teachers related to how their psychological openness, help-seeking propensity, indifference to stigma, and overall IAMHS attitudes can impact their decision to refer a student for services. The results of the study indicate that a person is more likely to be

open to accessing mental health services the higher in age he or she is. This means that there needs to be more training and awareness of mental health biases with younger teachers to help them understand that their personal beliefs regarding mental health and accessing services can impact their decision to refer a student for help.

Gender was another area in which the study indicated that women were more likely to be open to accessing mental health services than men. This could lead to trainings to educate teachers on how their own gender may sway their decision to help a student access services he or she may need. The more that teachers are aware of factors that impact their decision making, especially when it has to do with the well-being of one of their students who may need help, the higher the chances will be that students may be able to access supports.

With the results of this study, there are implications for social change in the way teachers are educated about their own perceptions of mental health. Such change would help teachers understand that their own perceptions and beliefs about mental health do impact their decision-making process. Their students may need supports that they would not otherwise conclude that they needed if they were not aware of how their beliefs can impede the decision to refer a student for help. This change in thinking would help many adolescent students gain access to services that they may need to assist with their mental health needs. In turn, this could lead to students who are more successful in high school and after they graduate.

Adjusting how all school districts refer students for mental health services is also important in order to ensure that children are offered mental health services if they need

them. With the current referral process being disjointed and inconsistent based on districts' or schools' preferences in conjunction with limited training for teachers related to the mental health needs of children, this leaves children having inconsistent access to services. Consistent training along with a consistent basic referral process would provide children access to mental health services. Again, this would lead to students who are more successful in school and after they graduate, as having access to mental health services leads to fewer negative effects related to mental health issues (Lengeveld et al., 2011).

References

- Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. *Psychology and Health, 26*(9), 1113-1127.
- Auger, R. W. (2004). The accuracy of teacher reports in the identification of middle school students with depressive symptomatology. *Psychology in the Schools, 4*(3), 379-389. DOI: 10.1002/pits.10164.
- Betts, J., Bullone, E., & Allen, S. (2009). An examination of emotion regulation, temperament, and parenting style as potential predictors of adolescent depression risk status: A correlational study. *British Journal of Developmental Psychology, 27*, 473-485. Doi: 10//1348/026151008X314900.
- Byrket, J., & Young-Jones, A. (2012). The many faces of adolescent depression: A multi-cultural review. *LOGOS: A Journal of Undergraduate Research, 5*, 41-53. Doi: 10.1155/2011/403602.
- Centers for Disease Control and Prevention. (2010, May). Attitudes towards mental illness. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a3.htm>
- Cruz-Sanchez, E., Feu, S., & Vizuete-Carrizosa, M. (2011). Education level as a member of the subjective well-being and mental health in the Spanish population. *Universitas Psychologica, 12*(1), 31-40.
- Currin, J. B., Hayslip, B., & Temple, J. R. (2011). The relationship between age, gender, historical change, and adults' perceptions of mental health and mental health services. *International Journal of Aging and Human Development, 72*(4), 317-341.

- Dow, H. D., & Woolley, S. R. (2011). Mental health perceptions and coping strategies of Albanian immigrants and their families. *Journal of Marital and Family Therapy*, 37(1), 95-108.
- Ellonen, N., Kaariainen, J., & Autio, T. (2006). Adolescent depression and school social support: A multilevel analysis of a Finnish sample. *Journal of Community Psychology*, 36(4), 552-567. DOI: 10.1002/jcop
- Fisher, E. H., & Turner, J. LeB. (1970). Orientation to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35(1), 79-90.
- Gladstone, T., & Beardslee, W. (2009). The prevention of depression in children and adolescents: A review. *Canadian Journal of Psychiatry*, 54(4), 212-221.
- Han, S. S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs. *Journal of Abnormal Child Psychology*, 33(6), 665-679. Doi: 10.1007/s10802-005-7646-2.
- Heydari, A., Dashtgard, A., & Moghadam, Z. E. (2014). The effect of Bandura's social cognitive theory implementation on addiction quitting of clients referred to addiction quitting clinics. *International Journal of Nursing and Midwifery Research*, 19(1), 19-23.
- Hoven, C. W., Doan, T., Musa, G. J., Jaliashvili, T., Duarte, C. S., Ovuga, E., WPA Awareness Task Force. (2008). Worldwide child and adolescent mental health begins with awareness: A preliminary assessment in nine countries. *International Review of Psychiatry*, 20(3), 261-270. DOI: 10.1080/09540260801995950.

- Johnson, C., Eva, A. L., Johnson, L., & Walker, B. (2011). Don't turn away: Empowering teachers to support s students' mental health. *Clearing House*, *84*(1), 9-14. Doi: 10.1080/00098655.2010.484441.
- Jorm, A. F., Kitchener, B. A., Sawyer, M. G., Scales, H., & Cvetkovski, S. (2010). Mental health first aid training for high school teachers: A cluster randomized trial. *BMC Psychiatry*, *10*(51), 1-12. Doi: 1471-244X/10/51.
- Kirchner, J. E., Yoder, M. C., Kramer, T. L., Lindsey, M. S., & Thrush, C. R. (2001). Development of an educational program to increase school personnel's awareness about child and adolescent depression. *Education*, *121*(2), 235-246.
- Kurumatani, T., Ukawa, K., Kawaguchi, Y., Miyata, S., Suzuki, M., Ide, H., ... Uemoto, M. (2004). Teachers' knowledge, beliefs and attitudes concerning schizophrenia. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 402-409. DOI 10.1007/s00127-004-0758-0.
- Langeveld, J., Joa, I., Larsen, T. K., Rennan, J. A., Cosmovici, E., & Johannessen, J. O. (2011). Teachers' awareness for psychotic symptoms in secondary schools: The effect of an early detection program and information campaign. *Early Intervention in Psychiatry*, *5*, 115-121. Doi: 10.1111/j.1751-7893.2010.00248.x.
- Loades, M. E., & Mastroyannopoulou, K. (2010). Teachers' recognition of children's mental health problems. *Child and Adolescent Mental Health*, *15*(3), 150-156. doi: 10.1111/j.1475-3588.2009.00551.x.
- Loya, F., Reddy, R., & Hinshaw, S. P. (2010). Mental illness stigma as a mediator of differences in Caucasian and South Asian college students' attitudes towards

psychological counseling. *Journal of Counseling Psychology*. Advance online publication. doi:10.1037/a0021113

Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health, 10*(6), 574-582.

Maughan, B., Collishaw, S., & Stringaris, A. (2013). Depression in childhood and adolescence. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 22*(1), 35-40.

Martin, G., & Pear, J. (2007). *Behavior modification: What it is and how to do it*. Upper Saddle River, New Jersey: Pearson Prentice Hall.

Masillo, A., Monducci, E., Pucci, D., Telesforo, L., Battaglia, C., Carlotta, A., ... Girardi, P. (2012). Evaluation of secondary school teachers' knowledge about psychosis: A contribution to early detection. *Early Intervention in Psychiatry, 6*, 76-82.

Mattison, R. E., Carlson, G. A., Cantwell, D. P., & Asarnow, J. R. (2007). Teacher and parent ratings of children with depressive disorders. *Journal of Emotional and Behavioral Disorders, 15*(3), 184-192.

Midlarsky, E., Pirutinsky, S., & Cohen, S. (2012). Religion, ethnicity, and attitudes toward psychotherapy. *Journal of Religion and Health, 51*, 498-506. DOI 10.1007/s10943-012-9599-4

Modrzejewska, R., & Bomba, J. (2009). A comparative study on adolescent depression in the general population of junior high school adolescents in a big city based on an

analysis of outcomes of 1984 and 2001 studies using the IO “B1” symptom inventory. *Archives of Psychiatry and Psychotherapy*, 4, 31-36.

Mori, L., Panova, A., Keo, Z., Cheung, C., & Stokes, J. (2007). Ego identity and substance use of ethnically diverse college students. *Psychology Journal* 4(4), 161-172.

Munson, M. R., Floersch, J. E., & Townsend, L. (2009). Attitudes towards mental health services and illness perceptions among adolescents with mood disorders. *Child Adolescent Social Work Journal*, 26(5), 447-466.

Possel, P., Rudasill, K. M., Sawyer, M. G., Spence, S., & Bjerg, A. (2013). Association between teacher emotional support and depression symptomology in Australian adolescents: A five year longitudinal study. *Developmental Psychology*, 49(11), 2135-2146. doi: 10.1037/a0031767

Quiroga, C., Janosz, M., Bisset, S., & Morin, A. J. (2013). Early adolescent depression symptoms and school dropout: Mediating processes involving self-reported academic competence and achievement. *Journal of Educational Psychology*, 100(2), 552-560. DOI: 10.1037/a0031524

Reavley, N. J., & Jorm, A. F. (2011). Stigmatizing attitudes towards people with mental disorders: findings from an Australian national survey of mental health literacy and stigma. *Australian and New Zealand Journal of Psychiatry*, 45, 1086-1093. Doi: 10.3109/00048674.2011.621061.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children’s mental health in schools: Teacher perceptions of needs, roles and

- barriers. *School Psychology Quarterly*, 26(1), 1-13. DOI: 10.1037/a0022714
- Renning, J., Haavisto, A., Nikolakaros, G., Helenius, H., Tamminen, T., Moilanen, I., ... Sourander, A. (2011). Factors associated with reported childhood depressive symptoms at age 8 and later self-reported depressive symptoms among boys at age 18. *Social Psychiatry Psychiatry Epidemiol*, 46, 207-218. Doi: 10.1007/s00127-010-0182-6.
- Repie, M. S. (2005). A school mental health issues survey from the perspective of regular and special education teachers, school counselors and school psychologists. *Education and Treatment of Children*, 28(3), 279-298.
- Rivet-Duval, E., Heriot, S., & Hunt, C. (2011). Preventing adolescent depression in Mauritius: A universal school-based program. *Child and Adolescent Mental Health*, 16(2), 86-91. Doi: 10.1111/j.1475-3588.2010.00584.x.
- Roeser, R. W., & Midgley, C. (1997). Teachers' view of issues involving students' mental health. *The Elementary School Journal*, 98(2), 115-133. Doi: 0013-5984/98/9802-0002.
- Sadik, S., Bradley, M., Al-Hasoon, S., & Jenkins, R. (2010). Public preceptions of mental health in Iraq. *International Journal of Mental Health Systems*, 4, 26-36. doi:10.1186/1752-4458-4-26
- Salmon, G., & Kirby, A. (2009). The role of teachers in the assessment of children suspected of having AD/HD. *British Journal of Special Education*, 36(3), 147-154.

- Shanley, E. (1981). Attitudes of psychiatric hospital staff towards mental illness. *Journal of Advanced Nursing*, 6, 199-203. Doi: 03092402/81/0500-0199.
- Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2005). Long-term outcome of a school-based, universal approach to prevention of depression in adolescents. *Journal of Counseling and Clinical Psychology*, 73(1), 160-167. Doi: 10.1037/0022-006x.73.1.160.
- Statistics Calculators. Retrieved from <http://www.danielsoper.com/statcalc3/calc.aspx?id=1>).
- Tosi, D. J., & Eshbaugh, D. M. (1976). The personal beliefs inventory: A factor-analytic study. *Journal of Clinical Psychology*, 32(2), 322-327.
- Trudgen, M., & Lawn, S. (2011). What is the threshold of teachers' recognition and report of concerns about anxiety and depression in students? An exploratory study with teachers of adolescents in regional Australia. *Australian Journal of Guidance and Counseling*, 21(2), 126-141. DOI 10.1375/ajgc.21.2.126
- Vogel, W. (2012). Depression in children and adolescents. *South Africa's Continuing Medical Education Journal*, 30(4), 114-117.
- Wahl, O., Susin, J., Lax, A., Kaplan, L., & Zanita, D. (2012). Knowledge and attitudes about mental illness: A survey of middle school students. *Psychiatric Services*, 63(7), 649-654. Doi: 10.1176/appi.ps.201100358.
- Webb, T. L., Sniehotta, F. F., & Michie, S. (2010). Using theories of behavior change to inform interventions for addictive behaviors. *Addiction*, 105, 1879-1892.

Weisz, J. R., Suwanlert, S., Chaiyasit, W., Weiss, B., & Jackson, E. W. (1991). Adult attitudes toward over and under controlled child problems: Urban and rural parents and teachers from Thailand and the United States. *Journal of Child Psychology and Psychiatry*, 32(4), 645-654. Doi: 0021-9630/91

Wilkinson, P., Croudace, T., & Goodyer, I. (2013). Rumination, anxiety, depressive symptoms and subsequent depression in adolescent at risk for psychopathology: A longitudinal cohort study. *BMC Psychiatry*, 13(1), 60-78. doi:10.1186/1471-244X-13-250

Williams, J. H., Horvath, V. E., Wei, H., Van Dorn, R. A., & Johnson-Reid, M. (2007). Teachers' perspectives of children's mental health service needs in urban elementary schools. *Children and School*, 29(2), 95-107. Doi: 1532-8759/07.

Wong, M., Brinkworth, M., & Eccles, J. (2013). Moderating effects of teacher-student relationship in adolescent trajectories of emotional and behavioral adjustment. *Developmental Psychology*, 49(4), 690-705. Doi: 10.1037/a0027916.

Appendix A: Study Introduction Letter

Dear Sir or Madam:

The purpose of this study is to determine how teachers' personal attitudes about mental health services may impact a decision to refer a student for services. Along with this exploration, demographics are asked to be provided to determine if any of those factors may also influence personal attitudes about mental health.

This questionnaire and two vignettes will take you approximately 5-10 minutes to complete.. Participation is strictly voluntary and you may discontinue your participation at any times. When you complete the survey, demographic information and respond to the vignettes, you will submit the information through Survey Monkey.

Although Cypress Fairbanks Independent School District (CFISD) has given me permission to request your participation in this study, they are not associated with this research in any way. In the event that you have any questions, concerns, or complaints about this research, feel free to contact me at Christine.breuer@waldenu.edu. Alternatively, you may contact my committee chair, Cheryl Tyler-Balkcom at Cheryl.tyler-balkcom@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210.

Your cooperation is very much appreciated,

Sincerely,

Christine Breuer

Appendix B: Consent Form

You are invited to take part in a research study of teachers personal beliefs about mental health. This researcher is inviting all high school classroom teachers to be in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Christine Breuer who is a doctoral student at Walden University.

Background Information:

The purpose of this study is to determine the impact teacher’s personal attitudes about mental health impact their decision to refer a student for services who may be exhibiting symptoms of depression.

Procedures:

If you agree to be in this study, you will be asked to:

- Complete a short questionnaire (no more that 5 minutes) to measure your beliefs about mental health
- Provide some basic information, such as gender, ethnicity, years of teaching and years of education.
- Read two or three brief scenarios and respond to them with a “yes” or a “no”

Here are some sample questions:

- Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns
- Having been mentally ill carries with it a burden of shame
- If good friends asked my advice about a psychological problem, I might recommend that they see a professional

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Cypress Fairbanks ISD will treat you differently if you decide not to be in the study. If you decide to join the study now, you can will still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life such as the use of technology and getting frustrated or upset. Being in this study would not pose risk to your safety or wellbeing.

Participating in this study will help to understand the factors that may be keeping adolescent students from getting mental health services to address some symptoms related to depression.

Payment:

There is no payment or gift for your participation in this study.

Privacy:

Any information that you provide will be kept confidential. Additionally, all of your responses will be kept anonymous. The researcher will not use your personal information for any purpose outside this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by keeping all information locked in a file cabinet and access is limited to the researcher only. Data will be kept for a period of at least 5 years, as required by the university.

Contact and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at Christine.breuer@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is YET TO BE DETERMINED.

Please print or save this consent form for your records.

Statement of Consent:

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

If you wish to sign consent, you may print and sign on the line below and return the form via email to Christine.breuer@waldenu.edu.

Signature/Print Name

Date

Appendix C: IASMHS Scale

Inventory of Attitudes toward Seeking Mental Health Services (IASMHS)

The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g. psychologists, psychiatrists, social workers and family physicians).

The term *psychological problems* refers to reasons one might visit a professional. Similar terms include mental health concerns, emotional problems, mental troubles, and personal difficulties.

For each item indicate whether you disagree (0), somewhat disagree (1), are undecided (2), somewhat agree (3), or agree (4):

- | | Disagree |
|---|---------------|
| Agree | |
| 1 There are certain problems which should not be discussed outside of one's immediate family..... | [0 1 2 3 4] |
| 2 I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems | [0 1 2 3 4] |
| 3 I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems..... | [0 1 2 3 4] |
| 4 Keeping one's mind on a job is a good solution for avoiding personal worries and concerns..... | [0 1 2 3 4] |
| 5 If good friends asked my advice about a psychological problem, I might recommend that they see a professional | [0 1 2 3 4] |
| 6 Having been mentally ill carries with it a burden of shame | [0 1 2 3 4] |
| 7 It is probably best not to know <i>everything</i> about oneself | [0 1 2 3 4] |
| 8 If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy ... | [0 1 2 3 4] |
| 9 People should work out their own problems; getting professional help should be a last resort..... | [0 1 2 3 4] |

- 10 If I were to experience psychological problems I could get professional help if I wanted to.....[0 1 2 3 4]
- 11 Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.....[0 1 2 3 4]
- 12 Psychological problems, like many things, tend to work out by themselves.....[0 1 2 3 4]
- 13 It would be relatively easy for me to find the time to see a professional for psychological problems[0 1 2 3 4]
- 14 There are experiences in my life I would not discuss with anyone[0 1 2 3 4]
- 15 I would want to get professional help if I were worried or upset for a long period of time[0 1 2 3 4]
- 16 I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it[0 1 2 3 4]
- 17 Having been diagnosed with a mental disorder is a blot on a person's life[0 1 2 3 4]
- 18 There is something admirable in the attitude of people who are willing to cope with their conflicts and fears *without* resorting to professional help.....[0 1 2 3 4]
- 19 If I believed I were having a mental breakdown, my first inclination would be to get professional attention[0 1 2 3 4]
- 20 I would feel uneasy going to a professional because of what some people would think.....[0 1 2 3 4]
- 21 People with strong characters can get over psychological problems by themselves and would have little need for professional help[0 1 2 3 4]
- 22 I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.....[0 1 2 3 4]
- 23 Had I received treatment for psychological problems, I would not feel that it ought to be "covered up"[0 1 2 3 4]
- 24 I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.....[0 1 2 3 4]

Appendix D: Demographic Information

Demographic Information:

Gender: _____

Age: _____

Ethnicity: _____

Years of Education (Highest Level): _____

Years of Teaching: _____

Appendix E: Case Vignettes

Case Vignettes:

#1 –A 17 year old student is observed to be quiet, will typically come into your classroom and directly go and sit at the student’s desk. Occasionally the student will talk with peers in the classroom, but the student does not seem to be overly interested in the conversation. The student rarely raises his/her hand in class, either to participate or to ask questions. The student completes about half of the homework that is given in class, and when the student is corrected on work in class, the student listens, but doesn’t seem to try and change the work that the student has done wrong. When encouraged to try, the student makes remarks such as “I can’t do this” and “I always get this wrong anyway”. The student’s grades are mostly “D”’s on work that the student completes and turns in. The student does not attend tutoring or any other recommended academic supports that are recommended. The student is observed to be staring off during class, and sometimes will fall asleep and need to be redirected.

Refer: YES NO

#2 – A 14 year old student is observed to be solitary, no talking with other students in the classroom. The student is observed not to smile, nor seem interested in interacting with anyone in the classroom. The student does not turn in classwork nor homework, yet passes all of the tests that are taken for the class. This results in the student having a low “D” of failing average in your class. The student will does not participate in class, and does not ask any questions when assignments are given. The student has lost a few pounds in the past weeks, and appears to look tired almost every day. When the student is provided one on one teacher support, the student appears to listen, yet does not apply any of the information provided, and seems uninterested in applying any information provided. The student has been absent more in the past months, but this is not different from prior attendance records received from junior high school.

Refer: YES NO