

AN INVESTIGATION OF THE MENTAL HEALTH LITERACY OF HIGH SCHOOL
ADVANCED PLACEMENT TEACHERS

by

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ABSTRACT

EMILY K. KRAFTSON. AN INVESTIGATION OF THE MENTAL HEALTH
LITERACY OF HIGH SCHOOL ADVANCED PLACEMENT TEACHERS
(Under the direction of DR. REBECCA SHORE.)

With adolescent mental health problems on the rise and teachers being in a prime position to support students, this study sought to further inform public educators and policy makers about mental health literacy (MHL). This study intended to fill a scholarly research gap and inform future MHL training needs for teachers and implications for their professional practice. Additionally, this study sought to address the limited research available on the newly deemed “at-risk” population of students in high achieving schools (HASs) enrolled in accelerated courses taught by Advanced Placement (AP) teachers. The purpose of this basic interpretive qualitative study was to investigate the perceptions of high school AP teachers in HASs regarding MHL by understanding how they perceive and develop their MHL knowledge base, the effectiveness of training they have received, and the relationship between their MHL knowledge and professional practice. Results of the study from semi-structured one-on-one interviews with five high school Advanced Placement (AP) teachers within a HAS indicated that the MHL knowledge base of these teachers was inadequate for supporting students with mental health problems. Further results indicated that MHL training they have received was insufficient, leading them to rely on experience to develop knowledge and trained professional to intervene with students. Implications included the need for targeted, comprehensive pre-service and school-level MHL training and curriculum for high school AP teachers to be developed, integrated across courses, and monitored.

DEDICATION

This dissertation is dedicated to my immediate family members. To my husband, Dr. Jeffrey Kraftson and my two daughters, Abigail and Katelyn Kraftson.

Jeff—You are the reason I pursued school leadership. I owe much of the knowledge and confidence I have gained while serving in various leadership roles to the many ways you have modeled effective leadership. Thank you for also demonstrating consistent love and support to me throughout my educational journey. You are my best friend and I would not be where I am without you. I love you.

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LIST OF ABBREVIATIONS

ADHD	attention deficit/hyperactivity disorder
AP	Advanced Placement
CDC	Centers for Disease Control and Prevention
HAS	high achieving school
HL	health literacy
IRB	institutional review board
MHL	mental health literacy
RQ1	Research Question 1
RQ2	Research Question 2
RQ3	Research Question 3
RQ4	Research Question 4
SBMH	school based mental health

CHAPTER 1: INTRODUCTION

A growing area of concern in U.S. public schools is adolescent mental health. Recent estimates reveal that 13% to 33% of adolescents in American schools experience mental health problems at some point during their K-12 experience, with these rates on the rise (Boak et al., 2016; Centers for Disease Control, 2019; Merikangas et al., 2010). Contributing to these statistics are the significant challenge that adolescents have faced in recent years as a result of the environmental threats of the COVID-19 pandemic and the stigma associated with seeking mental health help in schools. Furthermore, if undiagnosed and untreated, mental health problems and disorders can lead to deleterious outcomes for adolescents in both the immediate and long term (Bhatia, 2007; Caldarella et al., 2019; CDC, 2019; Schlinder & Kientz, 2013).

The Centers for Disease Control (CDC) noted mental health disorders can interfere with mood, behavior, and thinking, resulting in chronic stress, anxiety, depression, and other issues (CDC, 2018). These mental health disorders can impact behavior, learning, academic achievement, and overall functioning. Additionally, mental health disorders can lead to poor educational and vocational achievement, problematic social interactions and personal functioning, and reduced life expectancy related to medical conditions or suicide (Bhatia, 2007). Adolescents with poor mental health may also later experience underemployment or unemployment, difficulties in adult relationships, and ongoing health concerns as adults (Caldarella et al., 2019; MacKean, 2011; Schlinder & Kientz, 2013).

An additional issue to be considered that contributes to these problems are barriers to effective adolescent mental health intervention, including some within the school environment. While many may associate mental health issues with low performing students, multiple studies support the recent assertion that adolescents in high achieving schools (HASs) are considered a

vulnerable population as well. This group experiences a unique set of mental health issues, stemming from academic performance stressors and consistent social comparison with peers (Luthar et al., 2020). A 2018 report by the Robert Wood Johnson Foundation supported the “at-risk” declaration of adolescents in HASs by indicating that excessive achievement pressures were one of the top four environmental threats to adolescent overall health and well-being (Geisz & Nakashian, 2018). Furthermore, numerous studies have found that adolescents enrolled in accelerated courses with high academic demands, called Advanced Placement (AP), can experience negative consequences, such as maladaptive coping mechanisms, substance use, and social isolation (Leonard et al., 2015; Suldo et al., 2008).

Another barrier to providing mental health support for students is current stressors related to the teaching profession and teacher roles in student mental health. Teaching is currently regarded as one of the most stressful occupations in the United States, often with demanding workloads (Leutner et al., 2017). In a study by Ball and Anderson-Butcher (2014), teachers reported experiencing stress related to student mental health issues but receiving little training about these issues. Furthermore, a number of studies indicate that teachers feel burdened not only by students’ needs, but by their own mental health needs as well (Moor et al., 2007; Rothi et al., 2008; Walter et al., 2006). Current experts such as Wilson and Marshall (2019) also note that there are high levels of teacher stress and the need for mental health support and training.

One additional barrier to providing mental health support for students is the stigma often associated with adolescents seeking mental health support. Scholars argue that there have been negative public opinions of and attitudes toward those experiencing mental illness, and these opinions have been slow to change (Wahl, 2012). In a study of 79 youth by Bowers et al. (2013), 69% of participants reported that the fear of being stigmatized was a major barrier to students

accessing needed services. The problem with stigma persists as there continues to be a lack of understanding about the definition and treatment of mental health disorders (Davis et al., 2021).

With research suggesting significant adolescent mental health concerns in U.S. HASs, as well as numerous barriers for adolescents to access needed supports, targeted intervention is warranted. Research also shows multiple benefits of effective mental health treatment for students, including improved social and behavioral adjustment, school performance, and learning outcomes (Koller, 2006). Because teachers have frequent and ongoing contact with students, schools can serve as a primary intervention resource for adolescent support (Frauenholtz et al., 2015). Due to the benefits of mental health intervention for adolescents in schools and the beneficial role teachers can play in providing support, some recent research has investigated mental health training methods for teachers (Han & Weiss, 2005; Vidourek & Burbage, 2019; Weist, 2005).

Researchers have argued that for a school-based prevention or intervention-focused approach to be successful, teachers must be equipped with comprehensive mental health knowledge and skills (Whitley et al., 2018). Numerous studies have found benefits from training educators in the promotion of student mental health, including improving stigma-related attitudes (Han & Weiss, 2005; Vidourek & Burbage, 2019; Weist, 2005). A promising construct for the development of teacher mental health knowledge that has been developed in recent decades is called mental health literacy (MHL). Defined by Jorm et al. (1997, p. 182) MHL is “knowledge and beliefs about mental disorders which aid their recognition, management, or prevention.” By understanding how high school AP teachers develop their MHL knowledge base and connect this knowledge with practice, it may be possible to understand and inform future teacher training

needs and best practices for addressing adolescent mental health intervention within HASs and for students enrolled in advanced courses.

The topic of teacher mental health literacy as it relates to professional practice and adolescent mental health is relevant for doctoral-level research as rates of adolescent mental health problems are on the rise and the development of MHL is a promising approach for intervention (Boak et al., 2016; Centers for Disease Control, 2019; Han & Wess, 2005; Merikangas et al., 2010; Weist, 2005). More research is needed on investigating stressors and mental health problems adolescents face when enrolled at HASs and in advanced courses. This topic has practical importance because gaining a deeper understanding of AP teacher perceptions of ways they develop MHL and how it relates to professional practice can inform current and future teacher training needs and best practices for student intervention. This topic has empirical importance because it will add to the body of research related to supporting students with mental health problems in a HAS setting and enrolled in accelerated courses. This topic has theoretical importance because the development of teacher MHL involves how teachers learn and apply new mental health knowledge into professional practice, such as through social processes.

Statement of the Problem

Despite the valuable opportunity for teachers and schools to serve as primary intervention agents and sites, recent research shows that teachers have limited knowledge of overall student mental health and commonly do not know how to address student mental health needs within the classroom (Osaigiede et al., 2018; Weston et al., 2018; Reinke et al., 2011). Furthermore, many students in HASs have the ability to maintain reputations of proficiently handling challenges, and as a result, their internalizing behaviors and mental health needs are often missed by teachers

(Ebbert et al., 2018; Flett et al. 2018). Consequently, academic learning and achievement can be compromised when support is not provided (Leschied et al., 2018).

While mental health literacy (MHL) holds promise as one means for reducing stigma and increasing access to high quality mental health care among adolescents there has been limited emphasis in research on the urgent need to educate teachers about adolescent mental health (Flaspohler et al., 2008; Mendenhall et al., 2009; Weston et al., 2018). In addition, with current MHL competencies being developed within the past decade, there is a limited body of research that has investigated mental health literacy among teachers (Frauenholtz et al., 2015). Furthermore, the type of training, including curriculum and method of instruction to be used to effectively develop teachers' MHL has yet to be determined (Whitley et al., 2018). To build teacher MHL, there is also a need to further study the current knowledge base regarding MHL, ways to develop this knowledge base, and MHL training needs.

Finally, with students in HASs recently being deemed an "at-risk" population, it is critical to further investigate high school teachers' understanding of MHL within the context of a HAS. Rodger et al. (2018) emphasized that MHL is an evolving concept that reflects the needs of each particular population. To date, there is little research specifically focused on high school AP teachers' MHL, or those teaching advanced courses. Therefore, this study sought to gain a greater understanding from high school AP teachers of their MHL knowledge base, how they develop this knowledge, and how it relates to their professional practice. The researcher hoped that the findings will inform training needs for pre-service and practicing teachers, particularly for those teaching advanced courses.

Theoretical Framework

The theoretical framework for this study was built around Lev Vygotsky's sociocultural theory. In this theory, social structures and processes shape an individual's mental functions and learning process (Vygotsky, 1978). The notion that individuals learn through experiences and social interactions, directly relates to the purpose of the study and the research questions. Educators who teach AP courses are typically perceived to be highly proficient teachers of their specific curriculum and receive additional advanced training in their area of expertise. AP courses are elective courses and as such, there is an underlying assumption that students who sign up to take these more rigorous and demanding high school courses are less inclined to need teachers with a thorough understanding of MHL. By applying sociocultural theory to AP teacher mental health literacy within the cultural context of a social high school environment, the researcher sought to understand how the development of their mental health knowledge relates to social aspects of their learning and professional practice.

Vygotsky's theory of learning through social processes has shaped much current research on teacher learning and professional practice as well as the current study. Recent research has shown that collaboration as a social construct and component of MHL can support effective and ongoing attention to adolescent mental health needs (Short et al., 2018). According to Fullan (2002), "information, of which we have a glut, only becomes knowledge through a social process" (p. 18). For decades, ample research has shown persistent benefits with learning and practice from teacher professional learning communities that involve teacher collaboration and sharing (Dufour, 2004; Fullan, 2002).

Using the lens of Vygotsky's sociocultural theory as a guide, the current study included interview questions related to the social nature of teacher learning. These interview questions

also related directly to the research questions as they focused on how AP teachers develop their MHL knowledge base and how this knowledge may be related to professional practice. Finally, due to the qualitative nature of the study involving the development of themes, findings conducted through inductive data analysis were analyzed alongside sociocultural theory to strengthen researcher understanding and reporting of identified themes.

Purpose

The purpose of this basic interpretive qualitative study was to investigate the perceptions of high school AP teachers in high achieving schools (HASs) regarding mental health literacy.

Research Questions

The following research questions guided this basic interpretive qualitative study:

1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?
2. How do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy?
3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?
4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

Overview of Research Methodology

This study was a basic interpretive qualitative study, meaning the study did not follow a single established methodology and instead drew upon one or more methodologies to comprehensively build a research design (Kahlke, 2014; Lim, 2011; Litchman, 2010; Merriam, 2002). Kahlke (2014) argued that basic, or generic studies allow researchers to access a variety

of methodologies by pushing and exploring boundaries, using numerous tools, and developing research designs that align with their beliefs, field, and specific research questions. Additionally, basic qualitative studies provide researchers with flexibility as well as the ability to employ strengths found in established methodologies (Kahlke, 2014).

Merriam (2002) expanded the description of basic qualitative studies as those that seek to understand how individuals construct or make meaning from their experiences and world. She further argued that basic interpretive qualitative studies are those that are epistemologically social constructivist and focus on “(a) how people interact with their experiences, (b) how they construct their worlds, and (c) what meaning they attribute to their experiences” (Merriam, 2009, p. 23). A basic interpretive qualitative approach was appropriate for this study as it provided the researcher with a way to better understand how AP teachers interpret, construct, and make meaning from their experiences related to MHL.

Data for this study was collected through individual participant interviews, or facilitated, interactive dialogues between each participant and the researcher (Halcomb & Davidson, 2006). As the study was qualitative in nature, data was collected via semi-structured interviews with the purpose of obtaining descriptive details of each participant’s knowledge and experiences related to mental health literacy. In this type of interview, researchers use an interview instrument for guidance, include probing and co-constructed follow up questions, and provide opportunities for building rapport and participant expression of how they construct meaning from their MHL experiences (Ravitch & Carl, 2021).

Research Site, Participants, and Data Collection

The study was conducted at a large public high school serving students in 9th through 12th grades in a suburban area near a major city in North Carolina. This site was selected because the

school is a HAS that offers 18 AP courses across eight departments. Approximately, 66% of students participate in AP courses. There are 20 teachers at the school that teach AP courses. The researcher recruited participants that currently teach at least one AP course at the selected school through purposeful sampling. In qualitative research, purposeful sampling means that participants are purposefully chosen to participate in a study for specific reasons, such as representing a specific population and location (Mertens, 2020; Ravitch & Carl, 2021). The researcher's goal was to obtain at least five participants representing various academic departments in the school. Specific academic departments that were included in this study are: (a) English, (b) Mathematics, (c) Social Studies, and (d) Science.

The next phase of participant recruitment involved scheduling an in-person interview with each participant. The semi-structured interview tool included pre-made and follow up questions aligned to the research questions (Appendix A). Each interview was transcribed by the researcher without the assistance of coding software to ensure responses were recorded as accurately as possible. Transcription, or the reproduction of spoken words, is beneficial to researchers as it allows for the facilitation of data analysis that brings the researcher close to their data (Halcomb & Davidson, 2006).

To enhance trustworthiness of the study, several actions were taken by the researcher to demonstrate credibility or the idea that the data and interpretation are truthful (Lincoln & Guba, 1985). First, member checking, or sharing interview transcriptions via email with participants, was conducted to enhance study credibility by allowing participants to view, confirm, and provide additional insight into their responses (Lincoln & Guba, 1985). Next, the researcher recorded field notes during each interview and used the data as a method of data triangulation (Ravitch & Carl, 2021). Finally, the researcher engaged in reflexive journaling following each

interview, allowing the researcher to review and expand upon field notes, and record reflections, questions, ideas, issues, and interview conduct (Halcomb & Davidson, 2006).

Significance of the Study

Adolescent mental health problems are on the rise and have significant short-term consequences that require intervention and support by school staff. Teachers are in a prime position to support students due to daily contact with them, yet research shows many teachers have low levels of MHL and lack knowledge related to adolescent mental health. In addition, MHL is a recent construct and there is limited research related to specific and effective training methods to build this knowledge. Moreover, there is limited research on the newly deemed “at-risk” population of students in HASs enrolled in accelerated courses taught by AP teachers.

This study builds upon the limited research and literature that have examined teacher mental health literacy within HASs in three ways. First, as numerous studies have found MHL training to be an effective method of increasing teacher mental health knowledge, this study allowed the researcher to gain deeper insight into AP teacher perceptions of the ways they have developed MHL, including training opportunities. Additionally, many previous studies used survey methods, thus limiting the depth of participant responses. By conducting individual participant interviews, the researcher obtained specific and detailed data that informed current and future secondary and postsecondary faculty and staff about the current state of teacher mental health knowledge as well as effective practices for training. Furthermore, this study critically examined a specific population of teachers that taught advanced courses to an “at-risk” group of students within a specific HAS setting. The rich data gained from this study also informed practices used to provide student mental health support within the school setting and with this population of students.

Delimitations

There were several delimitations associated with this study. First, the study interviews were all conducted during the spring of 2023. The researcher's focus for data collection was on participant perceptions at this point in time and not on the changes in participant perceptions over time. Gaining an understanding of participants' current MHL knowledge base, the development of this knowledge base, and their experiences with mental health training was of greatest interest to the researcher to help inform future practice.

The next delimitation of the study was the specific site and participant sample selection. The selected site met the characteristics of a HAS according to Luthar et al. (2020), such as offering rigorous coursework and rich extracurricular opportunities. Additionally, the five participants were all AP teachers that taught advanced courses, reflecting a hallmark of HASs. The researcher selected participants representing various academic departments, which allowed for analysis of patterns of similarities and differences within the collected data. A small sample size of five to seven participants was purposeful, as the researcher sought to gain deep and rich teacher perception data related to their experiences with MHL.

One final delimitation of the proposed study was the selected aspect of training and collaboration related to the development of MHL and professional practice. The participants experienced a variety of training methods and collaboration opportunities. Historical and current research on varied methods of training and collaboration reveal both constructs are effective methods to increase teacher knowledge (Moor et al., 2007; O'Connell et al., 2021; Ohrt et al., 2020). By focusing on these constructs, the researcher had the ability to connect findings with established research.

Assumptions

There were several assumptions associated with this study. The first assumption was that all participants would be currently employed as AP teachers at the selected site based upon participant self-reports. The second assumption of the study was that the sample size of five would result in sufficient and rich data that was used by the researcher to inform study findings, discussion, and implications. The third assumption of the study was that participants would be open and honest and would fully answer interview questions. To encourage transparency, the researcher informed participants that participation was voluntary and that confidentiality of collected data would be maintained through de-identification. A final assumption was that the interview protocol would result in desired responses and perspectives that the researcher sought from the participants to answer the research questions.

Definition of Terms

The following definitions of terms were applied in this study:

adolescents. The World Health Organization (2014) defined adolescents as those people between 10 and 19 years of age.

health literacy. According to the American Medical Association Ad Hoc Committee on Health Literacy (1992) health literacy was defined as the ability of individuals to understand and apply medical information given by health care providers, primarily within the health care delivery environment.

high achieving schools. Luthar et al. (2020) defined high achieving schools (HAS) as those with high standardized test scores, rich extracurricular opportunities and advanced academic offerings, graduates attending selective colleges and universities, and affluent families.

mental health. The Centers for Disease Control and Prevention (2018) defined mental health as our emotional, psychological and social well-being; it affects how we think, feel, and act, and it relates to our handling of stress, relations to others, and choices.

mental health literacy. Jorm et al. (1997, p. 182) defined mental health literacy (MHL) as “knowledge and beliefs about mental disorders which aid their recognition, management, or prevention.”

school-based mental health services. According to Borntrager & Lyon (2015), school-based school-based mental health services are defined as mental health services received by students in a school setting by mental health providers.

serious mental health disorder. Merikangas et al. (2010) defined serious mental health disorder as a mental health disorder with severe impairment and/or distress (Merikangas et al., 2010).

stigma. Vidourek and Burbage (2019), defined stigma as “an attribute or behavior, which is socially discrediting and results in that individual being perceived as unfavorable or abnormal by society” (p. 2).

Summary and Organization of the Study

Chapter 1 provided a broad overview of the study, including a review of the purpose of the study, research questions, theoretical framework, research methodology, study significance, delimitations, assumptions, and definition of terms. In Chapter 1, the researcher reported that increasing rates and the subsequent impact of short- and long-term adolescent mental health problems justifies action by researchers and educators. MHL is one promising approach to assist teachers with the tools needed to assist adolescents with mental health problems. As there is a lack of literature related to high school AP teacher perceptions of their MHL knowledge in

HASs, this study intends to fill a scholarly research gap and inform future training needs and implications for professional practice.

The following sections of the study are organized into four additional chapters. The next section, Chapter 2 reviews scholarly literature related to teacher mental health literacy, as well as the theoretical framework that relates directly to the purpose of the study and the research questions. Chapter 3 outlines the research design and methodology used in the study, researcher positionality, protection of human subjects, participant sampling information, data collection and analysis information, trustworthiness, and limitations. Chapter 4 provides a summary of the findings of the study by research question, including themes discovered by the researcher. Chapter 5 provides a discussion of the findings including implications for professional practice, contributions to the field of research, and conclusions and recommendations for further research. The study concludes with scholarly literature reference pages and appendices of forms and protocols used to complete the research and findings of the study.

CHAPTER 2: LITERATURE REVIEW

Introduction

Mental health, according to The Centers for Disease Control and Prevention (CDC, 2018), includes our emotional, psychological and social well-being; it affects how we think, feel, and act, and it relates to our handling of stress, relations to others, and choices. The CDC explained that mental health illnesses or disorders interfere with a person's mood, behavior, thinking, and ability to relate to others and include examples, such as chronic stress, anxiety, depression, ADHD, and conduct disorders (CDC, 2018). It is evident that mental health problems have a significant impact on individuals' ability to function personally, cognitively, behaviorally, and socially.

There is a need for urgency with addressing mental health as current trends reveal increasing levels of mental health problems. According to the National Institute of Mental Health (2021), report data estimates that 50% of Americans will be diagnosed with a mental illness during their lifetime. Mental disorders are also a leading cause of ill-health and disability world-wide (Thornicroft & Patel, 2014).

Early intervention and effective treatment of mental disorders can improve emotional and behavioral issues, making schools an important setting to address mental health problems (American Academy of Pediatrics Committee on School Health, 2003). Teachers are primary agents for intervention and need to have the knowledge and skills to recognize mental health difficulties in students, as well as the appropriate steps to take to provide them with needed support (Whitley et al., 2018). Mental health literacy (MHL) is one construct that can help teachers effectively understand student mental health issues in schools and help them cope (Weston et al., 2018).

Current research about the MHL of high school Advanced Placement (AP) teachers in high achieving schools (HASs) is limited. There is also limited research related to the effectiveness of MHL training over time, as well as the impact of MHL training on professional practice. The current lack of teacher mental health knowledge poses a potential limitation to the effectiveness of current efforts to assist adolescents experiencing mental health distress (Frauenholtz et al., 2017).

Ample research shows that MHL training and collaboration efforts can improve teachers' mental health knowledge and ability to support students with mental health problems (Jorm, 2012; Luthar et al., 2020; Mendenhall et al., 2009; Ohrt et al., 2020; Short et al., 2018; Wei et al., 2012; Yagamuchi, 2020). This study is designed to critically investigate the current MHL knowledge base among high school AP teachers, how they develop their knowledge base, the effectiveness of MHL training, and the relationship between MHL knowledge and professional practice. The information gained from this study will be valuable for informing future training needs and collaborative efforts to support students in crisis in HASs.

The review of literature in this chapter related to the current state of adolescent mental health and teacher MHL will be provided. Specifically, broad topics in this chapter include: (a) the current state of adolescent mental health, (b) addressing adolescent mental health through mental health literacy training and collaboration, (c) the theoretical framework with Vygotsky's sociocultural theory, and (d) the rationale for the study. Table 1 outlines the order of the broad topics and subtopics that will be reviewed.

Table 1 Literature Topics and Subtopics

Topic	Source
Current State of Adolescent Mental Health	
Mental Health Statistics and Impact	Boak et al., 2016; Merikangas et al., 2010; Reilly, 2015; Mental Health America, 2017; CDC, 2019;

	CDC, 2017; Bhatia, 2007; U.S. Government Accountability Office, 2008; MacKean, 2011; Schlinder & Kientz, 2013; Vanderlind, 2017; World Health Organization, 2014; CDC, 2022; Caldarella et al., 2019
COVID-19 Pandemic and Adolescent Mental Health	World Health Organization, 2020; Douglas et al., 2009; Kar, 2019; Guessoum et al., 2020; Lee, 2020; CDC, 2020, Racine et al., 2020; Brooks et al., 2020; Gazmararian et al., 2021; Rogers et al., 2020; CDC, 2022
Adolescent Mental Health in Schools	McEwan et al., 2007; Adelman, 2006; Trout et al., 2003; Popovic, 2012; Schindler & Kientz, 2013; Humensky et al., 2010; Mistry et al., 2009; Caldarella et al., 2019, Venville et al., 2016; Polanin et al., 2020; Rickwood et al., 2005; Flett et al., 2018; Davis et al., 2021; Vidourek & Burbage, 2019
High Achieving Schools Definition and Impact	Luthar et al., 2020; Ebbert et al., 2018; Geisz & Nakashian, 2018; NASEM, 2019; Dijkstra et al., 2008; Marsh et al., 2015; Renold & Allan, 2006; Reilly, 2015; Loades & Mastroyannopoulou, 2010; Williams et al., 2007; Flett et al., 2018; Gollner et al., 2018; Suldo & Shaunessy-Dedrick, 2013; Suldo et al., 2018; Suldo et al., 2008; Suldo et al., 2009; Leonard et al., 2015; Leschied et al., 2018; Luthar & Kumar, 2018; Luthar et al., 2018
Addressing Adolescent Mental Health in Schools	
Schools and Staff as Primary Agents for Intervention	Academy of Pediatrics Committee on School Health, 2003; Koller, 2006; U.S. Department of Health and Human Services, 2010; Borntrager & Lyon, 2015; Frauenholtz et al., 2015; Frauenholtz et al., 2017; Whitley et al., 2018; Maelan et al., 2018; Han & Wess, 2005; Weist, 2005; Lindo et al., 2014; Kirby & Keon, 2006; Marsh & Mathur, 2020
Barriers to Student Mental Health Support	Weston et al., 2018; Reinke et al., 2011; Osaigiede et al., 2018; Frauenholtz et al., 2017; Cohall et al., 2007; Walter et al., 2006; Eklund & Dowdy, 2014; McIntosh et al., 2014; Vidourek & Burbage, 2019; Wahl, 2012; Bowers et al., 2013; Ball & Anderson-Butcher, 2014; Moor et al., 2006; Rothi et al., 2008; Leutner et al., 2017; Greenberg et al., 2016; Kyriacou, 2010; Parker et al., 2018; Finney, 2006; Lyon et al., 2011; Wilson & Marshall, 2019; Luthar et al., 2020

Teacher Mental Health Literacy Defined	Weston et al., 2018; Jorm et al., 1997; American Medical Association Ad Hoc Committee on Health Literacy, 1992; Kutcher et al., 2016; WHO, 2013; Kanj & Mitic, 2009; Jorm, 2012; Reavely & Jorm, 2011; Kutcher et al., 2015; Mental Health America, 2016
Teacher Mental Health Literacy as a Facilitator	Mendenhall et al., 2009; Corrigan et al., 2012; Chan et al., 2009; Thornicroft, 2006; Eustache et al., 2017; Powers et al., 2014; Kutcher et al., 2016; Lasisi et al., 2017; Moor et al., 2007; Wei et al., 2011; Yamaguchi et al., 2020
Mental Health Literacy Training and Collaboration	Whitley et al., 2018; Ohrt et al., 2020; Anderson et al., 2019; O'Connell et al., 2019; Short et al., 2018; Dufour, 2004; Joyce et al., 1999; Dufour et al., 2006; Fullon, 2002; Rodgers et al., 2018; Anderson-Butcher et al., 2010; Frauenholtz et al., 2017; Luthar et al., 2020
Theoretical Framework	
Vygotsky's Sociocultural Theory	Scott & Palincsar, 2013; Levine & Marcus, 2007; Vygotsky, 1978; Scrimsher & Tudge, 2003;
Rationale for the Study	
Mental Health Literacy and High Achieving Schools Literature Gaps	Flaspohler et al., 2008; Kutcher et al., 2016; Whitley et al., 2018; Frauenholtz et al., 2015; Frauenholtz et al., 2017; Rodger et al., 2018

Current State of Adolescent Mental Health

Mental Health Statistics and Impact

Among adolescents, rates of mental illness are high and are cause for concern. According to the World Health Organization (WHO) (2014), adolescents are those people between 10 and 19 years of age. Recent estimates across studies show that the percentage of mental health problems, including anxiety, depression, or attention deficit/hyperactivity disorder (ADHD), among adolescents is between 13% and 33%, with these rates on the rise (Boak et al., 2016; Centers for Disease Control, 2019; Merikangas et al., 2010). Also, just over 22% of adolescents between the ages of 13 and 18 experience a serious mental health disorder, defined as a mental

health disorder with severe impairment and/or distress (Merikangas et al., 2010). According to Reilly (2015), approximately 15% of adolescents ages 17 to 18 are diagnosed with depression. A report by Mental Health America (2017) revealed youth with untreated depression ranged from 42% to 77%. Recent data from the High School Youth Risk Behavior Survey distributed biannually by the CDC (2019) revealed several mental health concerns among high school students, including 36.7% reporting feeling sad or hopeless, 18.8% seriously contemplating suicide, and 8.9% attempting suicide. Finally, suicide continues to be the second leading cause of death among American youth ages 12-17 (CDC, 2022). These statistics provide compelling evidence in current research of the prevalence of mental health problems among adolescents.

Mental health disorders can have negative consequences for adolescents in both the short-term and long-term. Adolescents with mental health conditions can experience feelings of hopelessness, extreme sadness, and inability to function due to depression and anxiety (Vanderlind, 2017). If undiagnosed and untreated, mental disorders can lead to poor educational and vocational achievement, problematic social interactions and personal functioning, and reduced life expectancy related to medical conditions or suicide (Bhatia, 2007). According to the U.S. Government Accountability Office (2008), only 32% of students with a serious mental health disorder pursue postsecondary education, which significantly limits future occupational achievement and potential for earnings. Finally, students with poor mental health may later experience underemployment or unemployment, difficulties in adult relationships, as well as ongoing health concerns as adults (Caldarella et al., 2019; MacKean, 2011; Schlinder & Kientz, 2013).

COVID-19 Pandemic and Adolescent Mental Health

Another significant contributor to adolescent stress in schools is the recent impact of the COVID-19 pandemic. In 2020, the significant spread of COVID-19 was such that the WHO deemed it a pandemic affecting every continent (World Health Organization, 2020). While there is little data and few studies to date on the current impact of the pandemic on adolescents, and no data on the long-term impact, some preliminary findings and a review of research from previous pandemics have merit. Douglas et al. (2009) and Kar (2019) found that during times of pandemic, such as natural disasters, there is an increased risk of Post-Traumatic Stress Disorder, depression, and anxiety among adolescents. In a recent paper, Guessoum et al. (2020), noted that stressful life events, extended home confinement, brutal grief, intrafamilial violence, and overuse of the Internet and social media can influence adolescent mental health and result in increased psychiatric disorders such as Post-Traumatic Stress Disorder, Depressive, and anxiety disorders, and grief-related symptoms.

Preliminary findings from the impact of the COVID-19 pandemic reveal that adolescents have experienced unparalleled interruptions to daily life, which can lead to mental illness, including anxiety, depression, and stress related symptoms (Lee, 2020). The CDC (2020) suggests that adolescents may experience stronger responses than adults to the stress of crises such as the COVID-19 pandemic. A current study by Racine et al. (2020) involved a review of child and adolescent anxiety, depression, and traumatic stress experienced during the COVID-19 pandemic, with findings in existing literature pointing to an increase in depressive and anxiety symptoms in children and adolescents. Brooks et al. (2020) recently examined psychological implications of quarantine and found negative psychological effects such as posttraumatic stress.

While research about the impact of the COVID-19 pandemic is ongoing, some additional studies in the U.S. have resulted in important findings related to adolescent mental health. In a recent study by Gazmararian et al. (2021) in two high schools in Georgia, results revealed almost 25% of respondents were very worried about the pandemic, approximately 33% felt nervous/anxious or depressed, 43% felt lonely or isolated, and 50% felt stressed three or more days in within the past week. Another recent longitudinal mixed-methods study by Rogers et al. (2020) with adolescents in four major U.S. regions found adolescents experienced heightened negative affects during COVID-19. Specifically, Rogers et al. (2020) found that increases in negative affects among adolescents were associated with greater depressive symptoms, anxiety symptoms, and loneliness when compared to pre-pandemic mental health. Additionally, a recent report from the CDC (2022) revealed that 37% of youth experienced poor mental health during the COVID-19 pandemic and 44% experienced persistent feelings of sadness or hopelessness in the past 12 months. Despite the lack of long-term data on the impact of the COVID-19 pandemic on adolescent mental health, recent short-term data reveals increased stress, anxiety, and depression. These data are concerning for educators as negative impacts of the pandemic compounds the stress already being experienced by students related to testing and accountability measures in schools.

Adolescent Mental Health in Schools

There are other significant consequences of mental health problems in schools for students that impact behavior, learning, and academic outcomes. According to McEwan et al. (2007), mental disorders may lead to chronic absenteeism or dropping out of school. Mental illnesses have also been shown to make it difficult for youth to meet expected grade level standards or reach his or her academic potential (Adelman, 2006). Trout et al. (2003) found that

youth with mental health disorders are more likely to display academic difficulties and perform at least one year below grade level than peers without disorders. In addition, students with poor mental health typically have lower grade point averages and graduation rates in comparison to their peers (Popovic, 2012; Schindler & Kientz, 2013).

In terms of behavior, adolescents with depressive symptoms have reported difficulty focusing and completing homework, lower grades, less school engagement, and negative attitudes about education (Humensky et al., 2010; Mistry et al., 2009). In addition, students with mental health conditions often struggle to consistently and effectively process information, navigate social situations, and maintain poise and confidence (Venville et al., 2016). Research also reveals that when mental health needs are not appropriately supported in schools, symptoms can negatively impact peer relationships and students' overall school engagement (Caldarella et al., 2019). Other significant consequences that can result when mental health issues are not treated or when there are disruptions in treatment, include negative behaviors that lead to school violence instigation and involvement in criminal or delinquent acts (Polanin et al., 2020).

Another concern related to the impact of student mental health problems in schools is the mismatch between the prevalence of mental health difficulties and the use of services, which is often related to lack of or inappropriate help-seeking behavior (Rickwood et al., 2005). Many adolescents hide problems behind a façade with those around them unaware of their pain and struggle (Flett et al., 2018). Youth often avoid seeking help from trained adults due to the stigma associated with mental health disorders (Davis et al., 2021). According to Vidourek and Burbage (2019), stigma can be defined as “an attribute or behavior, which is socially discrediting and results in that individual being perceived as unfavorable or abnormal by society” (p. 2). Their study, revealed adolescent participants feared being labeled as “crazy” if they sought mental

health support. It is clear that there are numerous consequences of mental health problems in schools for students that school staff must consider when designing and delivering interventions to support students.

High Achieving Schools Definition and Impact

Furthermore, beyond these pressing mental health risk factors and negative impacts for adolescents in general, current research has found additional stressors for adolescents in high achieving schools (HASs). HASs are those with high standardized test scores, rich extracurricular opportunities and advanced academic offerings, graduates attending selective colleges and universities, and the majority of students coming from wealthy families (Luthar et al., 2020). In these school settings, youth experience ongoing pressures to achieve, like their successful parents and constantly strive to distinguish themselves from their high performing peers. These students strive to gain admission to selective colleges and universities, and ultimately attain prestigious and well-paying careers (Ebbert et al., 2018).

HASs offer rigorous accelerated courses, such as Advanced Placement (AP) and students enrolled in these courses reported higher levels of stress than those enrolled in the general curriculum (Suldo & Shaunessy-Dedrick, 2013). AP courses are those offered on a course-by-course basis and provide students with the potential to earn college credit, with students selecting courses based upon interest (Suldo et al., 2018). The courses are taught by highly qualified AP teachers who have undergone additional training and involve high academic demands and rigorous national end-of-course exams (Suldo et al., 2018). Students enrolled in these courses report perceived stress from environmental stressors, and numerous studies have found negative consequences of stress resulting from high academic demands such as maladaptive coping mechanisms, substance use, and social isolation (Leonard et al., 2015; Suldo et al., 2008).

Largely due to the research and work of Luthar et al. (2020), youth in HASs have recently emerged as a vulnerable population with a unique set of problems. Additionally, a 2018 report by the Robert Wood Johnson Foundation declared youth in HASs to be “at-risk” of elevated levels of chronic stress due to excessive achievement pressures usually seen in affluent communities (Geisz & Nakashian, 2018). These elevated levels of chronic stress can affect adolescent overall health and well-being. Furthermore, a report from the National Academies of Science, Engineering, and Medicine (NASEM, 2019) included students in HASs among subgroups who are particularly vulnerable to maladjustment given rising evidence of high rates of clinically significant mental health problems relative to national norms. A study on high-achieving student mental health by Suldo et al. (2008), found that higher levels of perceived stress co-occurred with compromised mental health. In a review of nine HAS cohorts of students, data showed high rates of serious symptoms related to anxiety and depression (Luthar et al., 2020).

One contributing factor to youth stress and mental health issues in HASs is the school environment as a social setting for peer comparison. According to Festinger’s (1954) Social Comparison Theory, humans have an innate need to evaluate their abilities and determine if their opinions are correct, which is achieved through comparison. In HASs, performance-based rewards systems are in place and high expectations and demands imposed by teachers and parents lead students to compare themselves to their peers with academic performance, physical appearance, and sporting achievements (Dijkstra et al., 2008). Students in a lower relative position within a HAS are more likely to be a ‘small fish in the pond’ and thus, develop a lower academic self-concept (Marsh et al., 2015). Also, the negative impact of living up to standards was confirmed in a study by Renold and Allan (2006) with results revealing that students’

experienced pressure and general anxiety related to achieving and maintaining a high level of academic excellence. Furthermore, constant comparisons with a group of highly successful peers can intensify anxiety related to falling behind and distress when not among the top performers (Luthar et al., 2020).

The culture in HASs involving a relentless pressure for students to “be the best” and achieve at high rates has added to the elevated risk for students in HASs to have serious adjustment problems, most notably internalizing and externalizing behaviors and substance use (Ebbert et al., 2018). A recent survey study by Luthar et al. (2020) resulted in robust effect size data related to the association between social comparison and internalizing symptoms among youth, such as anxiety and depression. While students exhibiting externalizing behaviors such as acting out are easy to identify, students with internalizing behaviors are more often missed by school staff (Reilly, 2015). Further research shows that teachers typically show greater concern for children presenting with behavioral rather than emotional symptoms (Loades & Mastroyannopoulou, 2010). Studies also show that teachers are more likely to characterize externalizing behaviors like defiance and outbursts of anger as emotional problems than internalizing symptoms such as sadness and anxiety (Williams et al., 2007). Therefore, as externalizing behaviors are more often recognized and are of greater concern to teachers, internalizing behaviors are often overlooked in the school setting (Williams, et al., 2007). Recent research of students enrolled in accelerated courses such as AP reveals that as students’ levels of stress increase, their risks for both internalizing and externalizing symptoms increase. However, the symptoms often go unnoticed or are misunderstood (Suldo et al., 2009; Suldo et al., 2018).

The idea that internalizing behaviors are often missed is a significant issue with adolescents in HASs, as recent data shows elevations in internalizing problems among

adolescents in HAS settings, across types of school and parts of the country (Luthar et al., 2020). Additionally, Flett et al. (2018) found that high achieving students often suffer deeply and need help, despite their ability to maintain a reputation that suggests they can handle challenges alone, making it difficult for even caring teachers to identify their needs. This notion is concerning, because emotional well-being, academic learning, and achievement can be compromised when mental health problems are left unattended (Leschied et al., 2018). Furthermore, the presence of diverse internalizing symptoms in youth at HASs is linked with elevated adjustment problems in schools, such as delinquency and substance abuse (Luthar & Kumar, 2018).

In terms of long-term impact, a recent study found a link between students from HASs and relatively poor adult outcomes likely resulting from long-term effects of negative social comparisons in selective high schools (Gollner et al., 2018). The researchers in this large-scale nationally representative longitudinal study conducted with high school students 50 years after the original assessment from Project TALENT, found that schools' achievement composition had negative effects on students' long-term life outcomes of educational attainment, income, and occupational prestige (Gollner et al., 2018). Moreover, a multi-wave longitudinal study by the New England Study of Suburban Youth (NESSY) (Luthar et al., 2018) found that elevated levels of substance abuse in HAS communities persist and even worsen through college. Given the evidence of significant short-term and long-term impacts on adolescent mental health problems in HASs intervention in schools is warranted.

Addressing Adolescent Mental Health in Schools

Schools and Staff as Primary Agents for Intervention

Targeted intervention is needed to support student mental health needs. Early identification of student mental health problems and application of appropriate intervention can

serve as a facilitator of positive short-term and long-term outcomes. Specifically, research shows that early and effective treatment of mental disorders can improve emotional and behavioral issues, resulting in a reduction in days absent, as well as contact with law enforcement (American Academy of Pediatrics Committee on School Health, 2003). Furthermore, effective mental health treatment for students can lead to improved social and behavioral adjustment, school performance, and learning outcomes (Koller, 2006).

The U.S. Department of Health and Human Services (2010) has prioritized the role of educational settings in preventing and identifying mental health disorders and has set mental health screening and treatment referral objectives. It is estimated that 70% to 80% of adolescents who receive mental health services receive the services in schools, called school-based mental health services (SBMH), as students spend more time in school than anywhere else outside the home (Borntrager & Lyon, 2015). Schools often serve as the primary intervention site for student mental health services due to close and frequent, ongoing contact with students and families (Frauenholtz et al., 2015). This universal contact allows schools to act as a bridge between student, family, and community to support students' mental health needs (Frauenholtz et al., 2017). Furthermore, school staff are in a prime position to identify signs of mental health distress in youth and connect them with needed services (Frauenholtz et al., 2015).

There are many critical school mental health professionals that collaborate to support students with mental health problems, including school counselors, nurses, school psychologists, and social workers (Frauenholtz et al., 2017). These staff members have specialized knowledge of school settings, as well as student mental health problems and interventions, and they can provide the mental health training and outreach needed to support school staff, students, and parents (Frauenholtz et al., 2015). Specifically, SBMH professionals can arrange for data

collection and can partner with teachers and community-based mental health partners to support students with mental health problems (Marsh & Mathur, 2020). School counselors are qualified staff that develop programs to support student development across areas, however, access to them may be a challenge due to limited availability and staffing levels (Marsh & Mathur, 2020).

Teachers are the school staff members who have the most frequent encounters with students and are in a position to intervene with student mental health problems. It is often the case that teachers are the first ones to observe behavior that shows the development or worsening of mental health problems (Whitley et al., 2018). Additionally, teachers have a crucial opportunity to promote positive mental health, identify student distress, and provide access to intervention and treatment (Frauenholtz et al., 2017). Recent research supports teacher recognition and understanding of their role in building positive relationships with students and supporting them with mental health care needs due to the impact these issues had on student learning (Maelan et al., 2018).

For a prevention or intervention-focused approach to be successful, teachers must be equipped with the knowledge and skills necessary to recognize mental health difficulties in students, promote positive mental health, and know the appropriate referral steps to take for support (Whitley et al., 2018). Numerous studies have found benefits from training educators in the promotion of student mental health (Han & Wess, 2005; Weist, 2005). In addition, teachers can learn specific skills to communicate more effectively with students within the classroom to help identify students in need of mental health services (Lindo et al, 2014). Furthermore, teachers can be taught to recognize early patterns of behavior that pose a risk for youth functioning, and their candid and close communication between teachers and family members can promote students' well-being and mental health (Kirby & Keon, 2006).

Barriers to Student Mental Health Support

While many teachers recognize their responsibility to care for students' well-being and are willing to take on student mental health needs, they may lack knowledge about the types of symptoms most frequently occurring in their schools (Weston et al., 2018). Recent research suggests teachers have limited knowledge of overall student mental health (Reinke et al., 2011). In a study by Osaigiede et al. (2018), teachers reported a lack of training on how to address youth mental health in the classroom. Results from a study by Frauenholtz et al. (2017), revealed school staff experience challenges with supporting students due to limited mental health knowledge, specifically with symptom identification, psychotropic medication, and community mental health services. Other studies show teachers lack confidence in managing student problems in the classroom, have difficulty with identifying mental health needs that require intervention, and experience discomfort with discussing mental health issues with students (Cohall et al., 2007; Walter et al., 2006).

In addition, according to Eklund & Dowdy (2014), teachers often struggle to effectively refer students with emotional or behavioral concerns to appropriate services. Furthermore, teachers experience great difficulty with identifying students with internalizing concerns such as anxiety and depression (McIntosh et al., 2014). Ample research shows that teachers may lack the knowledge needed to address student mental health and feel unprepared to identify and intervene with mental health concerns in the classroom, thus reflecting low mental health literacy (MHL).

Another barrier to mental health support for students is current stressors related to the teaching profession and teachers' roles in student mental health. In a study by Ball and Anderson-Butcher (2014), teachers reported experiencing stress related to student mental health issues but receiving little training. A number of studies indicate that teachers feel burdened by

students' mental health needs (Moor et al., 2007, Walter et al., 2006). Results of a study on teachers' views of their role as 'tier one mental health professionals', reveal that teachers are concerned by the changing nature of their roles and responsibilities, classroom management burdens, low job satisfaction, and their own psychological well-being (Rothi et al., 2008). Teaching is currently regarded as one of the most stressful occupations in the U.S., often with demanding workloads, inflexible school policies, and a lack of resources (Leutner et al., 2017). Moreover, salaries are low and hours are long (Greenberg et al., 2016).

Additionally, constant high levels of stress experienced in teaching can lead to negative emotions such as anxiety, anger, shame, and guilt (Greenberg et al., 2016, Kyriacou, 2010). Numerous studies have found that teachers are at an elevated risk for mental health issues (Parker, et al., 2018). Continued stress and mental health issues can lead to burnout, resulting in poor performance, job dissatisfactions, high turnover, and poorer outcomes for students (Luthar, 2020). Moreover, pressures of the job often weaken teachers' ability to perform the emotional work of student mental health support (Finney, 2006). A study by Lyon et al., (2011) revealed that large amounts of time are needed to properly address mental health training needs with evidence-based practices. Current experts such as Wilson and Marshall (2019) recognize the high levels of stress and pressures for teachers and burnout risks, and caution schools to provide teachers with training, systems, and supports to set them up for success with student mental health.

One final barrier, as previously discussed, is the stigma associated with adolescents seeking mental health support. Scholars argue that stigma is a significant barrier to mental health treatment for adolescents as there have been negative public opinions of and attitudes toward mental illness that have been slow to change (Wahl, 2012). In a study of 79 youth by Bowers et

al. (2013), 69% of participants reported that stigma was a major barrier to accessing school-based mental health (SBMH) services. The problem with stigma related to youth mental health persists as there continues to be a lack of understanding about the definition and treatment of mental health disorders (Davis et al., 2021). However, a study by Vidourek and Burbage (2019), revealed that education related to mental health issues would help improve stigma-related attitudes. Therefore, SBMH staff and teachers need to be aware of the impact that stigma can have on adolescent help-seeking behaviors and understand how to better integrate stigma into their support practices. It is evident that there are numerous barriers to supporting students with mental health needs in schools, including limited teacher knowledge, stigma, and teacher stress, that require focused attention in schools.

Teacher Mental Health Literacy Defined

Teachers need mental health knowledge in order for HASs to effectively address mental health problems among the students they serve. One promising construct for developing teacher mental health knowledge is mental health literacy (MHL). MHL has been defined as “knowledge and beliefs about mental disorders which aid their recognition, management, or prevention” (Jorm et al., 1997, p. 182). MHL is anchored in the larger field of health literacy (HL), which initially focused on the ability of individuals to understand and apply medical information given by health care providers, thus focused primarily within the health care delivery environment (American Medical Association Ad Hoc Committee on Health Literacy, 1992). Later, the construct was expanded to include health promotion and the improvement of both individual health-related behaviors and population health outcomes (Kutcher et al., 2016). According to the WHO (2013), current HL competencies include maintenance of good health, illness identification and understanding health care information, how to apply prescribed treatments,

and health related rights and advocacy for improvements. The WHO (2013) has identified that HL is possibly the most important part of the social causes of health, noting that HL level is a stronger predictor of health status than factors such as income or employment status. Schools are viewed as one social vehicle to achieve teach and strengthen HL (Kanj & Mitic, 2009; WHO, 2013). Therefore, teachers must develop high levels of MHL in order to understand the mental health issues facing youth in schools (Weston et al., 2018). By developing this construct, teachers can also help students cope and support their own self-care (Weston, et al., 2018).

Like the broadening of the HL focus, an evolution of the constructs of MHL are also in progress. Jorm et al.'s (1997) initial work on an individual's ability to recognize, manage, or prevent mental disorders as well as early mental health educational interventions, focused primarily on one or two common mental disorders. Jorm, along with colleagues expanded this construct to include recognition of the development of many mental disorders, knowledge of effective self-help strategies, and first-aid skills to help others with identified mental disorders (Jorm 2012; Reavely & Jorm, 2011). Essentially, MHL literacy has developed into an empowerment tool for people to participate in their own health care (Kutcher et al., 2016). MHL competencies are currently regarded as a complex, holistic, and action-focused in their aim to support mental health facilitation for self and others (Jorm, 2012; Kutcher et al., 2016).

As the foundation for mental health promotion and prevention, it is imperative to understand the components of MHL in greater detail. The current definition of MHL includes four distinct, but related components. According to Kutcher et al. (2015, 2016) these components include: (a) understanding how to obtain and maintain good health, (b) understanding mental disorders and treatments, (c) decreasing stigma, and (d) improving the efficacy of help-seeking behaviors, such as when and where to find evidence-based mental health care. High levels of

MHL involve maximizing appropriate and timely help for students and proactive facilitation of positive connections among school and community stakeholders within schools (Mental Health America, 2016). The current broadened and comprehensive scope of MHL constructs provide school staff with knowledge and practices to support students with mental health needs.

Teacher Mental Health Literacy as a Facilitator

With ample research revealing concerns with youth mental health problems and the need for targeted intervention, MHL holds promise as one means for reducing stigma and increasing access to high quality mental health care among adolescents (Mendenhall et al., 2009). Findings from numerous studies support the recognition that mental health knowledge and stigma are related constructs and that knowledge enhancement impacts stigma reduction related to mental health and illness (Chan et al., 2009; Corrigan et al., 2012; Thornicroft, 2006). Several studies that focused on improving teachers' knowledge of overall mental health revealed significant increases in knowledge, attitudes, mental health literacy, and a decrease in stigma (Eustache et al., 2017; Kutcher et al., 2016; Lasisi et al., 2017; Powers et al., 2014). These and other studies have investigated a variety of training programs, approaches, and models to increase the mental health knowledge or literacy of teachers.

In a study by Moor et al. (2007) involving training teachers in mental health knowledge, results showed that 90% of teachers were more likely to share the information gained with colleagues after the training. Another study of a School-Based Integrated Pathway to Care Model using a "School Friendly" MHL approach found that classroom interventions that enhance teacher knowledge and decrease stigma may be impactful steps to better adolescent mental health (Wei et al., 2011). Additionally, several studies in secondary schools involving the completion of targeted training and programming for teachers called *Mental Health First Aid*,

found associations between advanced mental health knowledge, increased helping behaviors, and reduced stigma attitudes (Jorm, 2012; Wei et al., 2012). Finally, in a systematic review of 16 studies conducted by Yamaguchi et al. (2020), initial findings from the majority of the studies of the effects of MHL programs for teachers, revealed a significant improvement in the outcomes of knowledge, stigma, helping behaviors, and confidence in helping students. Clearly, evidence from recent studies reveal that MHL training for teachers has resulted in gains in teacher knowledge, beliefs, and behaviors.

Mental Health Literacy Training and Collaboration

Several other systematic reviews have been recently conducted by researchers investigating the effectiveness of mental health literacy training programs or modalities. In a systematic review of 15 MHL trainings by Ohrt et al. (2020), 10 resulted in increased knowledge and mental health literacy for participants and 5 resulted in increased skill in intervention and appropriate service referrals. Another systematic review of 21 studies related to the effectiveness of MHL training programs for school professionals by O'Connell et al. (2021), found that the majority of programs were effective at increasing participant mental health knowledge, even when training for as little as two hours. While ample research has shown increases in teacher mental health knowledge in the short-term following training, how this training impacts their future actions has yet to be determined (Whitley et al., 2018). Several systematic reviews on mental health training programs for teachers such as the one by Anderson et al. (2019), argue for the need for further, rigorous research to determine what training programs or modalities can change teacher behavior or improve student mental health outcomes in both the short-term and long-term.

Considering the need to help teachers develop MHL knowledge through training over time, collaboration and positive connections as a component of MHL can support effective and ongoing attention to adolescent mental health needs (Short et al., 2018). According to Fullon (2002), ‘information, of which we have a glut, only becomes knowledge through a social process.’ (p. 18). Moreover, for real changes in culture and practice to occur, teachers need to engage in continuous learning through observation, discussion, sharing with others, and reflection related to approaches and strategies (Dufour et al., 2006; Fullan, 2002). For decades, ample research has shown persistent benefits from teacher professional learning communities that involve teacher collaboration and sharing (Dufour, 2004; Joyce et al., 1999).

According to Rodger et al. (2018), the success of school mental health programs and trainings require collaboration between school and community mental health professionals. Recent social work literature reveals positive outcomes when there is sharing of resources and working together among teachers, social workers, and community professionals in meeting student needs (Anderson-Butcher et al., 2010). Research shows that the development of high levels of MHL and collaborative interactions among teachers and mental health professionals are needed for early interventions to be successful when addressing students’ mental health needs (Luthar et al., 2020). However, studies show that knowledge gaps and low mental health literacy may prevent teachers from collaborating with one another and with mental health professionals or appropriately responding when needed (Frauenholtz et al., 2017). Therefore, strengthening teacher mental health literacy may also improve collaboration efforts, thus aiding in long-term change in teacher behaviors and practice related to supporting students with mental health problems. Further research is needed to determine the relationship between the social aspect of

teacher mental health literacy development and the impact of this construct on teacher professional practice.

Theoretical Framework

Vygotsky's Sociocultural Theory

The social process of learning provides the theoretical framework for this study. Lev S. Vygotsky, a Russian psychologist, began his work in the early 1900s and continued to develop his sociocultural theory throughout the 20th century based upon the notion that a learner's development is impacted by their social interactions with others and participation in culturally organized activities (Scott & Palincsar, 2013). Therefore, cognitive development is studied through an individual's shared experiences and how this engagement influences their engagement in other activities. Vygotsky (1978) maintained that an individual's mental functions derived from varied social structures and processes faced by the learner that shaped the learning process. This interplay between an individual's experience and social interactions, including structures and processes such as training and collaboration, directly relate to the purpose of this study and the research questions. Specifically, high school AP teachers will be asked targeted questions aimed at learning the ways they develop MHL through their social experiences in cultural settings, such as training and professional practice.

Simply stated by Scott & Palincsar (2013), through a sociocultural perspective, learning occurs through interaction, negotiation, and collaboration. This notion directly relates to teacher engagement in professional learning communities as a hallmark of their professional practice. Sociocultural theory also considers multiple cultural contexts as well as situational specificity of teacher practice (Scott & Palincsar, 2013). Furthermore, the theory calls for teachers to pay attention to and understand cultural and historical differences such as ethnicity and

socioeconomics of students as implications for interactions between students and self (Scrimsher & Tudge, 2003). These ideas directly relate to the current study, which will be focusing on AP teacher perceptions of practice in a HAS setting, a setting with a population of “at-risk” students with a unique set of mental health problems and environmental stressors.

Additionally, according to Scrimsher & Tudge (2003), Vygotsky’s theory includes the zone of proximal development, or the idea that teaching and learning is useful only when they move ahead of development and that learning occurs through a collaborative relationship between a teacher and a student. Furthermore, the zone of proximal development also offers insight about how internalization occurs, as individuals can master new skills, practices, and ways of thinking with the guidance of skilled teachers and through peer collaboration (Levine & Marcus, 2007).

Vygotsky’s zone of proximal development directly relates to this study, as the researcher will be investigating the effectiveness of training, including the social and collaborative aspects of this construct. According to Levine & Marcus (2007), teachers engaged in shared inquiry, discussion, and investigation related to new approaches are more likely to understand, internalize, and use the approach even if external support departs. Finally, the reciprocal aspect of the collaborative learning relationship will be investigated by the researcher in this study, as participants will be asked about how they develop their MHL knowledge base, which could include social interactions and learning during PLCs or collaborative opportunities with school-based mental health professionals.

Rationale for the Study

MHL and HAS Literature Gaps

Ample scholarly articles and research studies have revealed significant mental health concerns among adolescents that impact short-term and long-term outcomes. Current research also emphasizes initiatives to expand and improve SBMH services, such as school partnerships with community-based therapists and agencies (Flaspohler et al., 2008). Emphasis on these services and partnerships is understandable as there has been a long-standing gap between public health interventions and clinical interventions as well as considerable research to support the effectiveness of collaboration efforts (Kutcher et al., 2016). While SBMH services are one means of improving student mental health outcomes, there has been limited emphasis in research given to the urgent need to educate teachers about adolescent mental health, which is a central component to attaining the implementation of optimal mental health service for students (Flaspohler et al., 2008). With teachers having daily contact with students, they are ideally positioned to be key players on school collaborative teams to support the mental health needs of students (Whitley et al., 2018).

Additionally, given that current MHL competencies have been developed within the past decade, there is a limited body of research that has investigated mental health literacy among teachers (Frauenholtz et al., 2015). Moreover, with research showing general low levels of MHL among teachers and the need to develop this construct in order to provide high school students with effective mental health support, there is a need to further study and understand the current level and development of a MHL knowledge base, effectiveness of training, and the relationship between MHL knowledge and professional practice. Furthermore, the type of training, including

curriculum and effective methods of instruction to be used to develop teachers' MHL in both the short-term and long-term has yet to be determined (Whitley et al., 2018).

Guided by the lens of Vygotsky's sociocultural theory and the idea that learning occurs through social interactions, directly relates to the purpose of the study and the research questions. Ample research discussed in this paper shows strong support for the effectiveness of collaboration among various stakeholders in supporting students with mental health needs. When practiced well, MHL includes a focus on effective collaboration among stakeholders (Whitley et al., 2018). Therefore, studying in depth how teachers' MHL knowledge relates to their professional practice, with collaboration being a key component, may inform best practices for ongoing training. Furthermore, understanding how MHL knowledge is most effectively developed may inform current MHL training needs for teachers in both teacher preparation programs and within the public high school setting.

Moreover, the majority of current studies on MHL have relied upon survey methods, which has limited the scope of our understanding of the influence that teacher MHL has on their experiences with addressing student mental health needs (Frauenholtz et al., 2017). Therefore, employing interviews as part of a basic interpretive qualitative study research design would allow for a deeper analysis and understanding of teachers' daily experiences related to MHL. According to Yin (2018), information obtained from interviews helps a researcher gain deep insights and meaning that reflects participants' personal views, perceptions, and attitudes as well as detailed explanations of events.

Finally, with adolescents in HASs recently being deemed an "at-risk", vulnerable population in numerous reports and studies, it is critical to further investigate teachers' current understanding of student mental health symptoms and needs within the context of a HAS setting.

Rodger et al. (2018) emphasized that MHL is not a static or uniform model, but rather, is an evolving concept that reflects the needs of each particular population. Gaining a greater understanding from high school AP teachers about youth mental health problems in HASs can inform both pre-service and current MHL training needs for these accelerated course teachers. To date, there is little research specifically focused on high school AP teacher MHL in HASs. The qualitative data gained from this study may allow faculty at colleges and universities and staff within HASs to develop needed training opportunities to better prepare teachers to intervene, support, and provide high quality mental health intervention and care to students within the distinctive communities they serve.

Conclusion

A review of existing literature related to the current state of adolescent mental health and teacher mental health literacy was provided in this chapter. Specifically, broad topics included: a) the current state of adolescent mental health, b) addressing adolescent mental health through mental health literacy training and collaboration, c) the theoretical framework with Vygotsky's sociocultural theory, and d) the rationale for the study. These topics were discussed to align the research with the purpose of the study as well as the research questions. Gaps in literature reveal the need to further research the construct of MHL among high school AP teachers in a HAS setting.

The following chapter outlines the methodology used to investigate the current MHL knowledge base of high school AP teachers, how they develop this knowledge base, how this knowledge base relates to professional practice, and the effectiveness of MHL training.

CHAPTER 3: METHODOLOGY

Introduction with Research Questions

The focus of Chapter 1 was to introduce the purpose and scope of the study and Chapter 2 provided an analysis of scholarly research on the topic of adolescent mental health, mental health literacy, and addressing mental health issues in schools. The current chapter explains the methodology that was used to facilitate the study, answers the research questions, and guide the interpretation of findings.

As stated in Chapters 1 and 2, adolescent mental health problems are on the rise and have significant short-term consequences that require intervention and support by school staff (CDC, 2018; Bhatia, 2007; Schlinder & Kientz, 2013; Caldarella et al., 2019). Additionally, teachers are in a prime position to support students, yet research shows many teachers lack knowledge related to adolescent mental health (Weston et al., 2018; Reinke et al., 2011; Osaigiede et al., 2018). With teacher mental health literacy (MHL) shown to be a promising construct through which to address adolescent mental health, further research is needed to determine specific and effective training methods to build this knowledge. Specifically, this study sought to address the limited research available on the newly deemed “at-risk” population of students in high achieving schools (HASs) enrolled in accelerated courses taught by Advanced Placement (AP) teachers. This study intended to fill a scholarly research gap and inform future training needs and implications for professional practice. The purpose of this study was to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy. The following research questions guided this basic interpretive qualitative study:

1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?

2. How do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy?
3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?
4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

Epistemology and Research Methodology

The current study was based on the constructivist paradigm, or the idea that reality is socially constructed. According to Mertens (2015), the constructivist paradigm maintains that knowledge is socially constructed through an active research process with a researcher engaging in a personal and interactive mode of data collection. These assumptions and actions allow a researcher to understand the point of view and lived experiences of the participants (Mertens, 2015). Additionally, when guided by the lens of social constructivism, researchers seek to gain clarity and understanding of the environment and are able to explore complex views and perspectives (Creswell & Poth, 2018). Also reflected in this epistemology is the goal of discovering participant views of their experiences in relation to both historical experience and social interaction (Creswell & Poth, 2018).

This study aligned with the social constructivist epistemology, as the researcher sought to gain an understanding of how AP teachers construct meaning and use knowledge about adolescent mental health to support students with mental health problems. Specifically, the researcher sought to understand how AP teachers perceive the relationship between their MHL knowledge and professional practice, which involves engagement with the world around them. As social constructivism holds that truth and meaning are constructed in different ways, the

researcher in this study engaged with multiple participants to gain in-depth understanding of their unique perspectives related to the same phenomenon (Crotty, 1998).

The current study methodology was a basic interpretive qualitative study, also the most common type of qualitative research (Merriam & Tisdell, 2016). Merriam (2002) described basic qualitative studies as those that seek to understand how individuals construct or make meaning from their experiences and the world around them. She further argued that these types of studies are those that are epistemologically social constructivist and focus on “(a) how people interact with their experiences, (b) how they construct their worlds, and (c) what meaning they attribute to their experiences” (Merriam, 2009, p. 23). Therefore, the basic interpretive qualitative study methodology aligned directly with the social constructivist epistemology that guides the current study.

Moreover, a basic interpretive qualitative approach was appropriate for this study as this approach provided the researcher with a way to better understand how AP teachers interpret, construct, and make meaning from their experiences related to MHL. In order to gain rich descriptions of phenomenon under investigation, which is a hallmark of the basic interpretive qualitative approach, the researcher followed a highly inductive method of data collection and analysis (Lim, 2011). This coding and thematic analysis process is discussed in detail later in this chapter.

Positionality Statement

Currently, I am employed as a Director of Human Resources within a large public school district in North Carolina. Prior to my recent assumption of the Director position, I was a principal at a high achieving suburban elementary school within the same district. I am a Caucasian, middle-aged female, with a family legacy of educators. Both of my parents served as

teachers prior to retirement, with my father teaching for almost 45 years. I was raised to value education and was intrinsically driven to succeed. During my time as a K-12 student, my passion for life-long learning developed as a result of positive relationships with caring teachers.

As a previous K-12 student attending HASs, I understand and am aware of the stress related to rigorous coursework, competition, social and academic comparisons, and pressures to succeed across areas. As a school counselor, assistant principal, principal and current director who has worked in HASs over the past 11 years, I have observed significant increases in student mental health problems, including both internalizing and externalizing behaviors. Similarly, with teachers, I have observed marked increases in stress related to teaching, as well as overall low levels of MHL with knowing how to identify and support student mental health needs.

These concerns and challenges with supporting student mental health in HAS led me to pursue a greater understanding of teacher MHL. Specifically, I wanted to explore how teachers develop their mental health knowledge base and how this knowledge is integrated into their professional practice. Given my personal experience as a high school student, as well as current research revealing rates of adolescent mental health problems are on the rise, I focused on MHL at the high school level. Through this qualitative research study, I aimed to investigate the MHL of high school AP teachers. I hoped that findings inform current and future training needs and support effective practices for adolescent mental health intervention.

Moreover, as a high school student enrolled at a HAS, I experienced the benefit of close relationships with teachers for support. High school students have daily interactions with teachers and opportunities to share feelings and seek guidance. This personal experience aligned with research that calls for teachers to serve as primary points of contacts and support agents to understand and support students with mental health needs. Professionally, my positionality

affords me the advantage of daily observation of teachers and students as well as opportunities for collaboration with teachers and mental health support staff. I have observed teachers that are gifted at building positive relationships with students with mental health problems, working collaboratively with mental health support staff, and implementing mental health knowledge into professional practice. Therefore, by investigating the perspectives of current high school AP teachers, I aimed to gain insight about the potential relationship between mental health knowledge and professional practice.

Despite advantages of my positionality as a result of experience and opportunity, my positionality also has disadvantages that warrant discussion. Specifically, my positive view of the teacher-student relationship as well as my observation of specific ways teachers have effectively supported students with mental health problems, lent itself to potential bias related to each aspect of the study. I needed to be aware of potential assumptions based on my experiences and had to remember that my study was guided by social constructivist epistemology and the notion that truth and meaning are constructed in different ways. To prevent and monitor bias, I engaged in reflexive journaling for thorough reflection and analysis. I also conducted member checking and provided the interview transcription to each participant to allow for an opportunity to clarify and review the information they shared with the researcher.

Another disadvantage of my positionality worthy of consideration and mitigation was my role as a principal at the time, conducting a study with teacher participants. While the participants were not employed at my school and do not have an existing relationship with me, it is possible that the power dynamic of the supervisor-supervisee relationship influenced participant responses. Specifically, participants may have desired to respond in ways that demonstrated high levels of competency and avoided sharing weaknesses or being transparent.

Also, as I am not currently in the role of a teacher, participants may have found it challenging to relate to me as the researcher. To mitigate these potential issues related to trust, I established an environment of trust before, during, and after each interview by adhering to confidentiality, engaging in open dialogue, seeking clarification, defining key terms, and providing time for debriefing. In addition, a counselor at the school provided the recruitment presentation and participants were reminded that they could withdraw from the study at any time.

Protection of Human Subjects

According to Mertens (2015), ethics in research should be an integral part of the planning and implementation process, as well as using the results of the research. To ensure participants are protected during each stage of the research study and researchers follow ethical principles, an institutional review board (IRB) is a required step in the research approval process through institutions in the United States (Mertens, 2015). These IRBs are responsible to monitor compliance with the three ethical principles identified by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1978) in *The Belmont Report*, of beneficence, or maximizing benefit and minimizing risk, respect, or treating people with courtesy, and justice, or ensuring fair and reasonable procedures.

Each of the three principles of beneficence, respect, and justice was considered during each stage of the research study to ensure the protection of each human subject. First, the researcher provided each participant with an Interview Consent Form (Appendix D), which included information about the purpose of the study, the process for data collection, and the voluntary nature of the study. Next, each participant was given a pseudonym to ensure confidentiality with regard to their responses as the study topic can include sensitive information. To further protect participant confidentiality and potential conflicts of interest, no information

about the participants was shared by the researcher with the participants' schools, school districts, or the North Carolina Department of Public Instruction (NCDPI).

Maintaining a high level of confidentiality was the primary way the researcher protected participants and adhered to the ethical principles. To this end, the researcher transcribed each interview by hand without the use of software or another transcriber. Furthermore, the researcher was the only individual accessing the data for the collection and analysis process, with the exception of the counselor at the school that assisted with recruitment. When completed, transcribed interviews were shared with the appropriate participants for the purpose of clarification and confirmation. The researcher shared study findings with participants upon conclusion of the study.

To ensure full compliance with ethical and professional guidelines given by UNC Charlotte, this study was in full compliance with the IRB review process. The researcher exercised care and caution to participants by providing written and verbal notification to support understanding of the voluntary nature of the study. Moreover, there was minimal risk to participants in this study, as there was no exposure to physical or psychological harm or experimental treatment. Additionally, there were no penalties to participants if they chose not to participate in portions of the interview or to withdraw at any point during the study. All the conditions mentioned above were communicated to the participants at the start of their involvement in this study.

Participant Selection

For this study, the researcher recruited participants through purposeful sampling. In qualitative research, purposeful sampling means that participants are purposefully chosen to participate in a study for specific reasons, such as representing a specific population and location

(Mertens, 2020; Ravitch & Carl, 2016). Following a purposeful sampling method allowed the researcher to deliberately select participants that are currently employed at one HAS setting and that teach at least one AP course. Given a number of participants were selected that meet the above-mentioned criteria, the researcher was positioned to answer the research questions related to AP teacher perceptions of their adolescent mental health knowledge base and how this knowledge relates to their professional practice.

Another important consideration in the participant selection process was the sample size. According to Ravitch and Carl (2021), sample size is less important in qualitative than in quantitative research, as the goal of qualitative research is not to generalize, but rather to rigorously achieve deep and contextualized understandings of participant perspectives in order to thoroughly answer the research questions. In qualitative research, emphasis is on the details of the setting and situation, as well as obtaining rich descriptions of participants' experiences associated with the study topic (Roberts & Hyatt, 2019). To this end, the researcher sought a pool of participants reflecting various demographics, backgrounds, experience, and fields of work. Setting this aim allowed the researcher to gain a more comprehensive picture and establish patterns and differences of AP teacher perspectives across content areas. Specifically, the researcher's goal was to obtain at least five AP teacher participants representing various academic departments in the school. The academic departments that were included in this study are: (a) English, (b) Mathematics, (c) Social Studies, and (d) Science. With a smaller sample size and through researcher transcription by hand, in-depth identification and analysis of themes was possible and supported.

The recruitment process for this study followed two phases. First, the researcher accessed information about potential participants from the school website and if needed, from the

principal at the selected high school site. This information included name, department, and AP course(s) they are currently teaching. Initial recruitment was conducted with permission of the school principal and through an in-person 10-minute presentation with AP teachers at the site by a counselor at the school with a doctoral degree. During this presentation, the purpose of the research study and details about participation was shared. A counselor at the high school who has a doctoral degree with a high understanding of the research process facilitated the scripted presentation, developed by the researcher, about the study for potential participants at a time and location chosen by the principal. This measure prevented any potential influence on recruitment due to the researcher's supervisory role. The counselor offered to record questions posed during the presentation and debriefed with the researcher following the presentation. No questions were posed by participants, therefore, there were no follow up responses to questions needed.

Following the presentation and first phase of recruitment, potential participants were informed that they would each receive a follow up email with an invitation to participate. Follow up emails would have been sent if additional participants are needed. Once at least five participants were confirmed, the next phase of participant recruitment involved scheduling an in-person interview with each participant. Participants received an email to schedule an initial 30-to 60-minute interview. Interviews were scheduled at times, dates, and locations that were convenient for participants. The option private, in-person interviews were offered. Follow up interviews did not need to be scheduled.

Data Collection Techniques

The primary data for this study was collected during a two-month period in the spring of 2023. The format for data collection was five semi-structured one-on-one interviews with participants. According to Brinkmann & Kvale (2015), interviews in qualitative research,

including semi-structured, assist researchers with understanding the world from the participants' viewpoints and with discovering meaning from their experiences to help with theme development. As the current study was guided by the social constructivist epistemology and Vygotsky's sociocultural theory, the use of semi-structured interviews aligned directly with these constructs. According to Ravitch and Carl (2021), in semi-structured interviews, an interview protocol is used to guide the interview, but the researcher has flexibility with question order, rewording questions, and probing and follow up questions for a customized conversation that is co-constructed.

The interview process began with a strategic recruitment message provided by the researcher to each potential participant via personal email (Appendix B). Next, a follow-up recruitment message (Appendix C) with corresponding consent form (Appendix D) was sent via personal email to each participant. At least one week prior to the scheduled interview, the researcher sent a strategic 14-item demographic *Google* survey to each participant to complete via personal email (Appendix E). The demographic information collected via this tool provided the researcher with specific background information that enhanced clarity and context related to personal and professional experience. Finally, the researcher developed a strategic interview protocol form that aligned with and included the four research questions (Appendix A). The semi-structured interview tool included both pre-made and follow up questions added by the researcher during the interview to support context and clarity.

The interview protocol questions were categorized based upon existing research questions. The first category of questions was introductory in nature to provide the researcher with additional background and context information, and to establish trust. The following four categories of questions aligned directly with the four research questions: (a) what is the

perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy, (b) how do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy, (c) how do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy, and (d) how do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice. The purpose of the four categories was for the researcher to gain insight into how high school Advanced Placement teachers perceive and develop their mental health literacy knowledge base, as well as how this knowledge base relates to their professional practice.

To effectively answer the research questions through the interview process, the researcher was mindful about establishing rapport and trust with each participant. The researcher began each 30 to 60-minute interview with the sharing of introductory information, such as the study purpose, the voluntary nature of participation, and the opportunity to ask questions or withdraw at any time. Also, the researcher stated that the use of a passcode protected device would be used to collect interview responses that would later be transcribed verbatim and coded by hand by the researcher. These steps provided each participant with an understanding of the researcher and study and allowed for initial positive contact (Brinkmann & Kvale, 2015). Additionally, numerous interview skills were employed by the researcher to maintain trust and positive rapport throughout the interview process. According to Brinkmann and Kvale (2015), these skills included active listening and, showing interest, understanding, and respect for what the participant says. These skills also included stating clear expectations for the study purpose and participant roles, responsibilities, and rights.

Upon conclusion of each participant interview, the researcher continued to ensure trust through debriefing and providing a summary of main points learned during the interview. Specifically, the researcher asked each participant if they wanted to comment on this feedback and if they had any additional questions or information to share before concluding the interview. By allowing time for debriefing, the participants were provided with an opportunity to deal with or process through issues that developed before, during, or after the interview (Brinkmann & Kvale, 2015). This step also provided additional insight for the researcher related to dynamic aspects of the relationship between the researcher and participants throughout the interview process.

Additional steps the researcher took to support trust and accuracy of obtained data, included recording field notes (Appendix F) during each interview and recording reflexive journal entries (Appendix G) following each interview. These steps provided the researcher with additional personal reflection and impression information to add depth to the study findings (Brinkmann & Kvale, 2015). The researcher also conducted member checking by sharing the completed interview transcription and corresponding member checking protocol (Appendix H) with each participant, which will allowed them to confirm or correct the interview transcript as an accurate interpretation of their responses.

Instrumentation

The researcher used two data collection instruments in this study to gain rich data from participants. First, a demographic *Google* survey was sent via personal email to each participant (Appendix E) at least one week prior to the scheduled interview. The aim of this survey was for the researcher to obtain background information related to participant's experiences,

demographics, and current school setting. The instrument also provided a brief overview of the study purpose and participant rights and commitment needed to complete the study.

The second data collection instrument was the semi-structured interview protocol (Appendix A) that was used during each one-on-one participant interview. To align with the qualitative nature of the study, the protocol included strategically designed open-ended questions aligned with the research questions with the aim of gaining rich insight into teacher perspectives. Additionally, the semi-structured protocol aligned with sociocultural theory and the notion that learning is socially constructed. The protocol allowed for flexibility with question order to support fluid conversation and ongoing dialogue. The protocol design also allowed the researcher to ask other probing up questions as needed for clarification and to gain additional insight (Ravitch & Carl, 2021).

To support trustworthiness of the study and to vet the interview protocol, the researcher conducted a pilot interview with a participant who met the study criteria, but did not participate in the study. The vetting process involved sharing drafts of the study instrument with others that have expertise in the methodology used and can provide the researcher with critical feedback (Ravitch & Carl, 2021). Following the pilot interview, the researcher reviewed and analyzed provided feedback and interview data. The collected data was not used as research data for the study, but rather, was used to assist the investigator with refining the study design and interview instrument. A debriefing conference was held with the study chair and methodologist to review the collected pilot interview data and to discuss progress and data quality to assist with modifications to research design, questions, or interview protocol if applicable.

Data Analysis Procedures

In alignment with the research design of a basic interpretive qualitative study, the researcher employed a general qualitative data analysis approach involving thematic analysis. According to Ravitch and Carl (2021), thematic analysis involves investigating and determining similarities, differences, and relationships in the collected data, with an end goal of developing themes to answer research questions. Gibson & Brown (2009, p.129), define a theme as “a generalized feature of a data set.” In order to develop accurate and meaningful themes from the collected verbatim transcription data, the researcher followed an inductive approach to coding. Ravitch and Carl (2021) describe inductive coding as a coding process that aims to stay as close to the data as possible, with findings coming from the collected data.

To effectively organize the collected data, the researcher followed an initial coding process, called precoding. Precoding is a process in which a researcher engages with collected data such as field notes, reflexive journal entries, and interview transcriptions via multiple readings and critical questioning prior to starting the coding process (Ravitch & Carol, 2021). By taking careful time to review each piece of data prior to coding, the researcher was provided with an opportunity to consider the theoretical framework, previous literature, and research questions to support accuracy and alignment throughout the coding process. Ravitch and Carl (2021) argue that unstructured and uninterrupted readings provide researchers with a complete and holistic appreciation for the data. The additional time and focus also allowed the researcher to monitor personal bias as it relates to the collected data.

Following precoding, the researcher began the formal coding process, or the process by which data is assigned a particular meaning (Ravitch & Carl, 2021). With inductive coding, the aim was to generate new ideas from the collected data. Two-phase coding strategies are

commonly used with inductive coding processes and the researcher in this study will follow open coding and axial coding coined by Corbin and Strauss (2008). In the initial or open coding phase, the researcher coded individual words, phrases, segments, and incidents of text to summarize the data (Mertens, 2020). Next, in the axial coding phase, the researcher conducted pattern coding with the established codes from the open coding phase. This process involved moving from coding chunks of data to identifying patterns that can form coding categories (Ravitch & Carl, 2021). Finally, the researcher completed the iterative coding process by analyzing the categories to develop themes aligned with the research questions. Ravitch and Carl (2021) argue that themes may reflect patterns, commonalities, and relationships found among the developed codes and categories. However, themes can be generated in a variety of ways and some codes and categories may be modified or discarded.

To organize and display the analyzed data, the researcher utilized a *Google Sheet* spreadsheet with the following headings: a) Raw words/Phrases, b) Codes, c) Categories, and d) Themes. Direct participant quotes were recorded on a separate spreadsheet tab that aligns with each developed code in order to support accuracy of data and use in the findings section.

Trustworthiness

In qualitative research, trustworthiness is a necessary pursuit for researchers to establish truthfulness and confidence in all aspects of the study (Lincoln & Guba, 1985). Specifically, Lincoln and Guba (1985) define four primary tenets of trustworthiness as, (a) credibility, or the assumption of truth in the findings; (b) transferability, or the ability of the findings to apply broadly within the field; (c) dependability, or the consistency of findings whether they can be replicated; and (d) confirmability, or the level of neutrality of findings. As credibility is the most

important factor in establishing trustworthiness, the primary tenet the researcher focused on in this study is credibility.

To enhance trustworthiness of the study, several actions were taken by the researcher to demonstrate credibility or the idea that the data and interpretation are truthful (Lincoln & Guba, 1985). First, the researcher engaged in ongoing debriefing with the dissertation chair and methodologist to ensure each aspect of the study design and analysis process consider trustworthiness, minimize researcher bias, and remain close to the data as possible. According to Ravitch and Carl (2021), critical inquiry or dialogic engagement involves challenging both interpretations and assumptions of the researcher with a goal of maintaining ethics and study integrity.

Next, the researcher strengthened trustworthiness through the use of a predetermined set of semi-structured questions on the interview protocol. According to Ravitch and Carl (2021), semi-structured interviews provide dependability and consistency with asking the same questions to each participant, while also providing flexibility for personalized conversation. To further strengthen the trustworthiness of the interview protocol, the semi-structured interview questions were aligned with the research questions and the instrument was reviewed and revised following a pilot interview and follow up meeting with the dissertation chair and study methodologist.

Another step the researcher took in this study to enhance trustworthiness was member checking, or sharing interview transcriptions with participants. Following each interview, completed transcripts were emailed to each participant within one month with a corresponding Member Checking Protocol (Appendix H). Member checking enhanced study credibility by allowing participants to view, confirm, and provide additional insight into their responses (Lincoln & Guba, 1985). Member checking supported confirmability and neutrality of findings,

as this action supported both the accuracy of participant responses, as well as provided feedback to assist the researcher with monitoring for researcher bias.

Moreover, to ensure each tenet of trustworthiness was addressed throughout the study, the researcher was intentionally immersed in the collected data throughout the study for an extended time. Specifically, the researcher completed verbatim transcriptions of each interview and conducted multiple readings of each transcript to monitor for accuracy of participant statements and key phrases and codes to help determine themes.

Finally, data triangulation, or incorporating multiple data collection processes was pursued by the researcher to support trustworthiness of the study. According to Ravitch and Carl (2021), triangulation involves the strategic use of varied data sources for comparison to enhance the rigor of a study. To this end, the researcher recorded field notes during each interview, with studies finding that the use of written field notes taken during or immediately after an interview is superior to the use of audio-recordings with verbatim transcriptions alone (Halcomb & Davidson, 2006). Finally, the researcher engaged in reflexive journaling following each interview, which allowed the researcher to review and expand upon field notes, and record reflections, questions, ideas, issues, and interview conduct (Halcomb & Davidson, 2006).

Limitations

The researcher in this study made numerous strategic decisions to narrow the focus of the study, resulting in several limitations. First, the researcher selected a specific participant pool of high school AP teachers currently teaching at least one AP course. The researcher had access to these participants and selected the criteria based upon their proximity and work with students with a unique set of challenges and deemed “at-risk” in a HAS setting and enrolled in advanced courses. Furthermore, the researcher strategically selected a specific HAS setting for this study

due to the ample research revealing mental health problems for students enrolled in advanced courses within this setting. Also, the study was conducted in one high achieving North Carolina suburban high school. One HAS was selected as the study purpose was for the researcher to gain a deep and thorough understanding of participant perspectives and lived experiences related to MHL, not to understand comparison of teacher perspective across schools. According to Neubuer et al. (2019), the research of others' lived experiences can be a rich, cultivated and accurate source of information to develop important themes and add to a field of study. While the small sample size and selection of one school setting limits generalizability of findings, the researcher implemented strategies to address generalizability and study limitations.

First, the researcher strategically selected a demographically diverse sample of participants, such as gender, age, years of experience, and representing various high school departments to help broaden the scope of perspectives. Additionally, multiple means of data triangulation throughout the data analysis process were used as well as a strategically crafted semi-structured interview protocol tool to support dependability and consistency of findings. Suggestions for future studies included involving a greater sample size of a more demographically diverse sample of teachers and across multiple HASs. Chapter 5 includes additional limitations as a result of data collection and analysis.

Summary

In this chapter, the researcher has described the research design and data analysis process used to address the qualitative research questions of this study. These research questions were constructed to investigate the perceptions of high school Advanced Placement teachers regarding their MHL knowledge base. The goal of this study was to gain an understanding of the knowledge base of high school Advanced Placement teachers regarding MHL, how they

developed that knowledge, the effectiveness of training they have received on this construct, and the relationship between their knowledge and professional practice. The researcher followed a basic, interpretive qualitative research model and conducted one-on-one semi-structured interviews with participants to assist with effectively answering the research questions through inductive coding and theme development.

The next chapter provides a thorough description of the rich findings of the study. The demographics of the sample are described and responses to each of the interview sessions and related interview questions are documented as transcribed from audio-recorded interview sessions. Chapter 5, the final chapter, provides insightful references to each of the research questions as well as conclusions that were determined in Chapter 4. Finally, Chapter 5 includes recommendations and implications for professional practice, policy, and future research.

CHAPTER 4: FINDINGS

The purpose of this basic interpretive qualitative study was to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy (MHL). The study aimed to further understand how high school Advanced Placement (AP) teachers perceive and develop their MHL knowledge base, the effectiveness of the training they have received, and the relationship between their MHL knowledge and professional practice. The following research questions guided this study and served as the study objective:

1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?
2. How do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy?
3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?
4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

This chapter provides a participant summary to describe the specific population studied, as well as a detailed analysis of the study procedures. Additionally, findings are reported and explicated as themes aligned with each of the four research questions. Vygotsky's sociocultural theory (Vygotsky, 1978) guided the interpretation of study findings, as numerous references were made to the social structures and processes that shaped participant mental health literacy knowledge and understanding. The chapter ends with a summary that leads to the final chapter that includes further discussion and implications information.

Participant Summary

The participants that were selected for and participated in this study all met the study criteria. The researcher selected participants that are currently employed at one high achieving school (HAS) and that teach at least one AP course. All participants teach within one of four academic departments at a large public high school serving students in 9th through 12th grades in a suburban area near a major city in North Carolina. The participants were identified and recruited with the help of the school principal and counselor, as well as through follow up e-mail communications by the researcher.

To gain background knowledge about each participant, the researcher sent each participant a demographic Google Form survey via personal e-mail prior to each interview. The data obtained from the questionnaire provided the researcher with additional background information and context to assist with answering the research questions. Table 2 shows results from the demographic Google Form survey completed by participants, represented as cumulative, descriptive statistics. None of the participants had taught outside of North Carolina.

Table 2

Participant Demographic Survey Cumulative Data

	Frequency	Percentage
High school NC public education teacher (years)		
1-10	0	0
11-15	3	60
16-20	2	40
21->30	0	0

High school NC AP public
education teacher (years)

1-3	1	20
4-5	1	20
6-10	1	20
11-15	2	40
16->30	0	0

Current school (years)

1-3	0	0
4-5	0	0
6-10	1	20
11-15	3	60
16-20	1	20
21->30	0	0

Highest Educational level achieved

Bachelor's Degree	1	20
Graduate Teaching certificate	0	0
Master's Degree	4	80
Doctorate Degree	0	0

Number of undergraduate courses
with mental health topics

0	2	40
1	2	40
2	1	20
3+	0	0

Number of graduate courses with
mental health topics

0	1	20
1	2	40
2	1	20
3+	0	0
I did not participate in one	1	20

Age (years)

20–34	0	0
35–39	1	20
40–44	2	40
45–49	0	0
50–54	2	40
55–65+	0	0

Race

Caucasian	4	80
African American	0	0
Hispanic	0	0
Asian American	0	0
American Indian	0	0
Other	0	0
Chose not to disclose	1	20

Gender

Male	2	40
Female	3	60
Other	0	0

Choose not to disclose	0	0
AP department		
English	1	20
Math	1	20
Social Studies	2	40
Science	1	20
Foreign Language	0	0
Other	0	0
No. AP course sections		
0	0	0
1	1	20
2	1	20
3	3	60
4	0	0
Other	0	0
Mother's education level		
High school diploma	1	20
Associate's degree	2	40
Bachelor's degree	1	20
Master's degree	1	20
Doctoral degree	0	0
Father's educational level		
High school diploma	0	0
Associate's degree	1	20

Bachelor's degree	3	60
Master's degree	1	20
Doctoral degree	0	0

Note. Data for legal guardian and number of years in a similar school setting was not included as participants did not respond to these questions, likely because they were not applicable.

For the first four questions, eight ranges of years were provided to participants to select related to teaching experience. All participants fell within the middle ranges for the first two questions of 11-15 years (60%) and 16-20 years (40%) related to years of teaching experience as a high school public education teacher and as a high school public education teacher in North Carolina. The participant sample showed a more varied blend of years of experience related to teaching at least one AP course, with 1-3 years (20%), 4-5 years (20%), 6-10 years (20%), and 11-15 years (40%). In terms of years teaching at the current school, participants again fell within the middle ranges, with 6-10 years (20%), 11-15 years (60%), and 16-20 years (20%).

The highest educational level achieved of participants was the next question asked of participants and is shown on Table 2. The majority of participants have earned a Master's degree (80%). One participant's highest educational level was a Bachelor's degree (20%). Additionally, participants selected responses for the number of undergraduate and graduate program courses that included topics related to mental health with ranges from 0 to 4 or more. For both questions, the majority of participants had 0 or 1 courses related to the topic. Specifically, for the number of undergraduate courses, responses were 0 (40%), 1 (40%), 2 (20%). For graduate courses, responses were 0 (20%), 1 (40%), 2 (20%), and did not participate in a graduate program (20%).

Table 2 also illustrates participant ages based upon ten ranges. Participants spanned only three different age ranges, with all participants falling within the middle ranges. Specifically,

within the 35–39 years (20%), 40–44 years (40%), and 50–54 years (40%) age categories. For race, the majority of participants identified as Caucasian (80%), with one participant choosing not to disclose (20%). The sample was more varied in terms of identified gender, as participants indicated male (40%) and female (60%).

The table further shows the highest parental education level of each participant, which spanned across multiple levels. For participants' mothers' education level, participants indicated high school diploma (20%), associate's degree (40%), bachelor's degree (20%), and master's degree (20%). For participants' fathers' education level, participants indicated associate's degree (20%), bachelor's degree (60%), and master's degree (20%), thus reflecting higher overall educational levels for participants' fathers.

Additional participant data can be referenced below in Tables 3–6. This data is reflected in personalized descriptions of each participant within the narrative following the tables. The descriptions provided the researcher with rich detail and context related to participant demographic survey responses. Pseudonyms were given to each of the five participants as noted on the tables below.

Table 3

Participant Demographic Survey Individual Data: Teaching Experience

Participant	HS teacher (years)	HS teacher in NC (years)	HS AP teacher (years)	Current school (years)
Claire	16-20	16-20	11-15	16-20
Max	11-15	11-15	6-10	6-10
Kelly	11-15	11-15	11-15	11-15
Timothy	11-15	11-15	1-3	11-15
Sarah	16-20	16-20	4-5	11-15

Table 4*Participant Demographic Survey Individual Data: Age, Race, and Gender*

Participant	Age	Race	Gender
Claire	50-54	Caucasian	Female
Max	40-44	Caucasian	Male
Kelly	40-44	Caucasian	Female
Timothy	35-39	Choose not to disclose	Male
Sarah	50-54	Caucasian	Female

Table 5*Participant Demographic Survey Individual Data: Current Role and Mental Health Courses*

Participant	AP Department	Number of AP course sections	Number of undergraduate courses	Number of graduate courses
Claire	Science	3	0	2
Max	Social Studies	3	1	1
Kelly	Math	3	0	1
Timothy	English	1	1	did not participate
Sarah	Social Studies	2	2	0

Table 6*Participant Demographic Survey Individual Data: Educational Level*

Participant	Highest educational level achieved (self)	Highest educational level achieved (mother)	Highest educational level achieved (father)
Claire	master's	bachelor's	associate's
Max	master's	associate's	bachelor's
Kelly	master's	high school diploma	bachelor's
Timothy	bachelor's	master's	master's

Sarah

master's

associate's

bachelor's

Claire had taught as a high school public education teacher for 16-20 years within in the state of North Carolina, and at their current school. Additionally, Claire taught at least one AP course for 11-15 years, was age 50-54 and identified as a Caucasian female. She taught 3 AP course sections within the Science Department. Claire earned a master's degree while her parents had earned lesser degrees, with her mother earning a bachelor's degree and her father earning an associate's degree. Claire reported that she had no undergraduate courses and only 2 graduate courses that included mental health topics.

Max had taught as a high school public education teacher for 11-15 years within in the state of North Carolina. Additionally, Max taught at least 1 AP course at the current school for 6-10 years. Max was age 40-44 and identified as a Caucasian male. He taught 3 AP course sections within the Social Studies department. Max earned a master's degree while his parents had earned lesser degrees, with his mother earning an associate's degree and his father earning a bachelor's degree. Max only took 1 undergraduate course and 1 graduate course that included mental health topics.

Kelly had taught as a high school public education teacher for 11-15 years within in the state of North Carolina, and at the current school. Additionally, Kelly had taught at least one AP course during every year that she taught. She reported that she was age 40-44 and identified as a Caucasian female. She taught 3 AP course sections within the Math department. Kelly earned a master's degree while her parents had earned lesser degrees, with her mother earning a high school diploma and her father earning a bachelor's degree. Kelly reported that she took no undergraduate courses and only 1 graduate course that included mental health topics.

Timothy had taught as a high school public education teacher for 11-15 years within in the state of North Carolina and at the current school. Additionally, Timothy was relatively new to teaching AP, having taught at least 1 AP course for only 1-3 years. Timothy was age 35-39 and identified as a male with no identified race selected. He taught 1 AP course section within the English department. Timothy earned a bachelor's degree while his parents had earned higher degrees, with both his mother and father earning master's degrees. Timothy only took 1 undergraduate course that included mental health topics and he did not participate in a graduate program.

Sarah had taught as a high school public education teacher for 16-20 years within in the state of North Carolina. Additionally, Sarah taught at the current school for 11-15 years, but was relatively new to teaching AP, having taught at least 1 AP course for 4-5 years. Sarah was age 50-54 and identified as a Caucasian female. She taught 2 AP course sections within the Social Studies department. Sarah earned a master's degree while her parents had earned lesser degrees, with her mother earning an associate's degree and her father earning a bachelor's degree. Sarah only took 2 undergraduate courses and 0 graduate courses that included mental health topics.

The comparison between the education levels of each participant and their parents yielded a noteworthy finding as 4 out of 5 participants earned higher degrees than their parents. Two studies within the current decade found mental health literacy or knowledge was higher for individuals with a higher education level (Mendenhall & Frauenholtz, 2015; Sin et al., 2016). Sin et al. (2016) found that education level was a significant predictor for better mental health knowledge. This finding will be expanded upon in the Chapter 5 discussion.

Findings by Research Question

Despite some variation in participant responses to the interview questions, the researcher found numerous commonalities across interview data that yielded themes aligned with each research question. Specifically, the generated themes and corresponding subthemes aligned with participant understanding and perception of their MHL knowledge base, how they developed their MHL knowledge base, the effectiveness of training they had received, and the relationship between their MHL knowledge and professional practice. Each theme and subtheme are described in the following sections and are noted on Table 7 below.

Table 7

Theme and Subtheme Data

Research Question	Theme(s) and Subtheme(s)
RQ1	Primarily Based Upon Common Knowledge Societal Influence Inadequacy Admissions of Limited Knowledge Low Mental Health Literacy Reliance on Trained Professionals Limited Teacher Role Refer for Support
RQ2	Development is Gradual and Experiential Pre-Service Content is Isolated School-Level Content is Situational Personal Experience is a Facilitator
RQ3	Insufficient Lacks Impact and Meaning Inconsistent Brief

RQ4

Informal

Lacks Follow Up Supports

Awareness and Understanding Impacts Teacher-
Students Relationships

Flexibility

Response

Communication

RQ1: What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?

For Research Question 1, the researcher aimed to investigate how participants perceived their knowledge base regarding MHL. To achieve this end, data was analyzed related to participant knowledge about the four recognized components of MHL, including (a) positive mental health, (b) mental disorders and treatments, (c) stigma related to mental disorders, and (d) when, where, and how to seek help for mental health needs. Additional background information gained from the warm up questions, such as level of comfort and confidence with discussing adolescent mental health and the definition of MHL was used to assess the participants' level of MHL knowledge.

Primarily Based Upon Common Knowledge

The first theme developed from participant initial responses related to their general understanding of MHL knowledge base, was that this mental health knowledge was primarily gleaned from their accumulated common knowledge. Four out of five participants discussed the significant contribution that the common knowledge they had gained from society had had on their understanding of and ability to speak about mental health topics. This impact had been particularly heightened from their recent experiences from the COVID-19 global pandemic.

Societal Influence. Analysis of interview responses revealed that four of the five (80%) of participants discussed the influence that society had had on their mental health knowledge. Specifically, Claire stated, “I think this is one of the few silver linings coming out of quarantine and COVID where mental health is more in the forefront and important.” Another participant, Sarah also spoke to the common nature of specific disorders that are at the forefront of society by stating:

I think we know probably, recognize anxiety and depression the most. I don’t know a lot about some of the other disorders, but I think those two are probably what we, most of us are, or hear the most, or recognize in others.

Similarly, Kelly discussed the common nature of mental health topics and issues in high achieving schools (HASs) as it related to her knowledge and practice by stating:

I do teach AP level students in a high performing school, and um, and I do know that mental health is definitely an issue. I do like a question of the day, like a fun, whatever questions of the day, and um, most of the time like today is like do you think a hot dog is like a sandwich? But, like one time throughout the semester I ask them what is something that you think older generations should know about what it’s like to be a teenager today, and when I ask that question, the most common thing that they say is mental health really is a thing.

Timothy further elaborated on the notion that mental health is at the forefront of society and has influenced his knowledge and practice. When referring to mental health, Timothy stated, “It’s the air we breathe, and my awareness that they’re aware of these things allows me to use those as ways to express those things.” To further strengthen his argument, Timothy stated:

Honestly, I feel like almost everybody is more prepared to talk about mental health at this point than at any other point in history. My goodness, it is the “coin of the realm” [something having value or influence] at this point, um, it is the basis, sort of the default frame for which journalism is done and most of the psychology has basically eaten the public frame. So, I think that probably, more people are aware of it now than any other point in history.

Through statements such as these, each of the four participants who mentioned this theme made connections between the current state of mental health in society and their awareness or knowledge of the topic.

Inadequacy

The second theme developed from participant responses to Research Question 1 was feelings of inadequacy related to their more specific MHL knowledge base. Participant language included recurring admissions of limited knowledge, as well as cautious language. These responses crossed over the four curricular subject areas, as well as age and number of years teaching AP courses. Categorized low levels of MHL related to the MHL components displayed by all participants also supported the theme of inadequacy.

Admissions of Limited Knowledge. Participants were directly asked to define MHL as well as to respond to each component of MHL, with 100% of them using language referencing a limited knowledge. Specifically, when asked about more specific mental health literacy knowledge, Claire said, “not a lot,” and “I don’t have a good working knowledge,” Max said, “I’m not knowledgeable enough,” and “I don’t know the lingo.” Max also stated, “I don’t know,” multiple times throughout the interview, and Kelly also openly admitted to having a limited knowledge of MHL by stating, “probably not super knowledgeable,” and “I don’t have all the

answers.” Likewise, Sarah stated “I don’t know” and “I’m not sure” multiple times. Timothy, the English teacher and the youngest of the participants as well as the only participant with no Master’s degree spoke in detail about his lack of knowledge by stating:

I don’t know that much about treatments. I know a little bit about cognitive behavioral therapy, and sort of how that works. I know a little bit about, I have a vague, I mean I don’t even want to answer this question. I’m going to pull from like the movies and stuff and seeing people in psychology and stuff and therapy and stuff. I don’t think I know enough to answer.

This statement by Timothy reflects a lack of confidence and feelings of inadequacy as he did not even want to answer the question. Timothy went on to add further support to these feelings by stating, “I don’t feel confident or trained to deal with them directly,” and “I’m always terrified that there’s too much information. Like, I do not feel qualified to make any sort of assessments about those sorts of things.” Claire, the AP Science teacher and one of the oldest of the participants, also referred to lacking confidence by stating, “I am not confident in addressing it with parents because they sometimes are very touchy about it.”

The use of cautious, or hedging language by 100% of the participants also provided strong support for a lack of participant confidence and the theme of inadequacy. Specific words or phrases such as “could,” “may,” “might,” “possibly,” “maybe,” “it seems,” “sort of,” “I guess,” and “I think,” were used repeatedly in data analysis. Sarah stated these words or phrases 22 times, Claire stated them 24 times, Kelly stated them 27 times, Timothy stated them 38 times, and Max stated them 39 times. This high frequency of cautious language by all participants reflects hesitation when responding, and therefore suggests a lack of confidence which contributed to feelings of inadequacy.

Low Mental Health Literacy. A lack of confidence when discussing MHL components was also displayed with responses related to three of the four recognized components of MHL, including (a) positive mental health, (b) mental disorders and treatments, (c) stigma related to mental disorders, and (d) when, where, and how to seek help for mental health needs. When asked directly to respond to questions related to the four MHL components, the participants were only able to describe the first component, or positive mental health in detail and with common responses. Three participants commented on the notion that positive mental health does not necessarily mean you're always happy and positive. All participants described how positive mental health reflects an individual's healthy mental state and means that individuals have tools or supports to navigate through life. Specifically, when describing positive mental health, Claire stated, "ability to deal with daily life stressors," and "having the tools they need." Max described it as "being able to deal with the pressures of life in a healthy way," and "having coping skills." Kelly stated, "engages in behaviors and thoughts that are productive for their life," "know how to deal with bumps in the road," "know how to cope," and "coping mechanisms." Timothy stated, "have the supports they need," and "feel like they're making progress, developing mastery." Finally, Sarah used the phrases, "self-awareness," "asking for help if needed," "doing great mentally," and "taking care of yourself."

Despite confidence and commonalities across participant responses for the first MHL component, responses related to the other three components of mental disorders and treatments, stigma, and help seeking behaviors, could be described as based on common knowledge, and reflecting general low levels of knowledge. Each participant was able to provide only one to three comments or examples for each component, with each also including cautious language, revealing a lack of confidence and overall understanding. Additionally, when asked directly to

define MHL, all participants struggled with articulating a clear definition. Claire stated, “I have a very basic knowledge.” Max stated, “I don’t know how to define it, what those words mean,” and “I’m going to be at the low end of your survey.” Kelly responded that she was “not super knowledgeable about it.” Sarah stated, “I’m not sure. I’m not sure that we get as much on signs of a student that’s going through a crisis with mental health. I don’t know.” Timothy’s response included ample cautious language, pauses, and questions. He stated:

I mean. Like I would, I mean, I guess it’s like awareness, I mean is it? I don’t know. How I would define it? I would define it as if I’m like labeling someone as high mental health literacy, I think what I’m saying is that they have wisdom in terms of these things and can make those sorts of distinctions. They can make accurate assessments of what’s going on and sort of see the whole picture, the whole thing at once, and make those sorts of judgments.

Clearly, participants overwhelmingly used language and made statements reflecting limited and low levels of MHL knowledge, leading to feelings of inadequacy.

Reliance on Trained Professionals

The third theme that developed from participant responses and related to their low level of MHL and feelings of inadequacy, was a reliance on trained professionals. Responses often suggested that the role of the teacher in supporting student mental health needs is limited, thus requiring referrals to trained professionals for support.

Limited Teacher Role. Four of the five participants referred to the limited role that teachers play with adolescent mental health intervention. Specifically, when discussing student intervention, Max stated, “I typically don’t if it’s not on my plate specifically.” Kelly stated, “I know that I don’t have all the answers, and so I know that I probably need support in certain

places, certain times.” Timothy explicitly described the limited role that he had as a teacher with adolescent mental health intervention, when he stated:

I mean my side of it [mental health intervention with students] is pretty limited. It’s just like I see what I see on my own, like whether or not what they have access to, when they should seek help or something on their own, I don’t know.

This limited role that participants described in adolescent mental health intervention supports the need to rely on trained professionals. All participants discussed the need to refer students for support. In making this connection, Sarah stated, “I’m not trained in mental health, but I feel comfortable expressing concerns about students to guidance.”

Refer for Support. The practice of referring students with identified mental health issues to trained professionals, primarily guidance counselors, was also discussed by the other participants. Specifically, Claire stated:

I press forward, my first line of defense is the counseling team. I’m not in the business of recommending that a child need therapy or anything like that. You can get in a lot of trouble. But, I would involve the greater community of people. The people involved in that particular child’s case.

Similarly, Timothy stated, that he “brings kids to guidance,” and “I’m gonna send a kid out when I see anything, sort of out of the normal or that I think is sort of dangerous.” Max elaborated on the referral process for support and the role trained professionals play by stating:

And when, I know guidance department and then there’s a psychologist, right, school psychologist that can either provide service or point students in that direction, um, so I know that’s available for support.

Likewise, Kelly also spoke to the referral process and reliance on trained professionals by stating:

So, obviously the guidance department would be my go-to for any student that is having mental health concerns. I know I would refer them directly to a counselor, I would send them. I'm sure there are other, there's like a school psychologist, um, sometimes a school psychologist might get involved depending on the issues, but that's also another person that you could refer them to, um, those would be the ones that I would refer them to.

It is evident that the high school AP teacher participants in the study perceived their MHL knowledge is based upon common knowledge, is inadequate, and requires them to rely on trained professionals to help them with any perceived student mental health intervention.

RQ2: How do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy?

For Research Question 2, the researcher aimed to investigate how participants described the development of their knowledge base regarding MHL. Specific data was analyzed related to participant knowledge about (a) how to obtain and maintain positive mental health, (b) settings where they first learned about personal or adolescent mental health, and (c) tools or resources provided to them that have assisted with their understanding of mental health. Additional background knowledge gained from the warm up questions, such as their awareness of current mental health supports available for students at their school and their engagement with student mental health support staff members was used in the data analysis process.

Development is Gradual and Experiential

The primary theme developed from participant responses related to the development of their knowledge base regarding MHL, was that development was gradual and experiential.

Numerous participant statements discussed mental health knowledge growing over time, rather than occurring as a one-time event. Additionally, the gradual nature of the development of mental health knowledge was also discussed by participants through varied experiences across settings. Specifically, three emerging subthemes supporting the gradual and experiential nature of MHL knowledge development included, (a) pre-service content as isolated, (b) school-level content as situational, and (c) personal experience as a facilitator to knowledge development.

Pre-Service Content is Isolated. When responding to the question about settings where participants were first informed about personal or adolescent mental health, the majority of participants (80%) discussed college or graduate school. Of these participants, three of them provided the name of a specific course that included mental health information. Claire, the veteran science teacher stated, “adolescent psychology course.” Timothy, the youngest participant stated, “psychology classes in college” and “child psychology class in my certification program.” Sarah, the veteran social studies teacher stated:

Like educational psychology, I feel like we definitely covered some topics, um, and then also I remember taking a class that dealt with, I think it was an exceptional children’s class, and there were all sorts of different conditions that public school teachers, it included some mental health conditions in that.

Sarah and Timothy were the only participants that mentioned more than one pre-service course containing mental health content. Timothy spoke specifically about the impact of isolated adolescent mental health content on teacher mental health knowledge development by stating:

I just feel like there is a deficit, of, I mean, I only had one course in college that was in regard to mental health and it was the child psychology class. I had psychology classes with mental health stuff, but not directly related to students.

It is clear from analyzing participant data related to RQ2, that personal and adolescent mental health content was not integrated across multiple pre-service courses for these participants. Instead, the majority of participants discussed that mental health content was isolated to an individual course or courses that they had taken in years past. Of noteworthy consideration is that all five participants were enrolled in pre-service courses over 10 years ago, with no available data related to current pre-service course content.

School-level Content is Situational. Of the five participants, four discussed the development of their mental health knowledge at the school-level while employed as a high school teacher. The delivery of content was primarily in response to current identified situational student needs or mental health topics. Both Claire and Kelly mentioned social emotional learning, or “SEL” as a covered professional development topic at the school level, also considered a current mental health topic and increasingly common approach in schools today. To illustrate this point, Claire stated:

Well, we had various different trainings on social and emotional learning and then within that, talking about, you know, students where they are and the specific types of mental health issues, or that could, you know be part of what we’re seeing in our students.

This statement by Claire also reveals the focus on building teacher mental health knowledge related to current student mental health behaviors. Timothy also discussed the delivery of school-level content in response to current student behavior situational needs. Specifically, Timothy stated:

It’s like here, you stay educated on the things you need to know how to do and know how to do them and sort of pass those people along. So, I feel like I’m leaning on that really heavily, but that’s kind of like what it is. I know what I know from doing online trainings

about how to identify specific things that are going on with kids. Mostly, it's about depression and things like that.

Max expanded upon the situational nature of school-level content by speaking about this idea related to school type and level, by stating:

So, like, at a Title I school you'd have more of like the socioeconomic way of approaching these things, these issues, whereas here [HAS setting], it's not quite as much that, but more of a, uh, probably more conversational. These are questions you need to ask and things to look out for. And, age level happens too. Middle school versus high school is a big difference.

Analysis of data related to the situational nature of school-level mental health content delivery lends further support to the gradual and experiential nature of knowledge development across time and settings for high school AP public education teachers.

Personal Experience is a Facilitator. The reference of time and experience as facilitators to mental health literacy knowledge development for teachers was specifically referenced by Claire and Max. When asked about what was needed to become more knowledgeable on MHL, Max stated, “experience, I guess, time to develop.” This statement supports the impact of personal experience over time on the development of mental health literacy knowledge for teachers.

The other three participants mentioned learning about mental health in some capacity during childhood. Sarah stated, “health classes in school,” and Timothy stated, “aware mental health in middle school.” These two participants also spoke about pre-service knowledge development as mentioned above, thus supporting the building of mental health knowledge gradually across time and experiences. The strongest evidence for personal experience acting as

a facilitator to mental health knowledge development was provided by the childhood experiences of Kelly. This participant described life experiences related to significant mental health issues in detail and also described the gradual nature of mental health knowledge development. The following direct quote by Kelly illustrates this point:

It was definitely a gradual thing. There are definitely people in my life, like my best friend from high school, that was like depressed and dropped out of school for awhile and tried to commit suicide and her dad had to tell me. So, I've had to deal, I mean I've dealt with it. I don't know if I've always shined a light on it, and now, that's happening more in society and I think that's good. But, obviously working with students you see all different kinds of mental health issues, so I guess it's just me as well as society together gradually, like paying more attention to it.

Clearly Kelly was significantly impacted by childhood experiences related to mental health. Additionally, the fact that all participants mentioned time or experiences lend support to the theme that the development of teacher mental health knowledge is gradual and experiential.

RQ3: How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?

For Research Question 3, the researcher aimed to investigate how participants perceived the effectiveness of training they have received about MHL. Data analysis for this question was related to participant mental health trainings within and outside the school setting, training methods and formats used and those most beneficial to their learning, and follow up supports provided by trainers. Additional background knowledge gained from the warm up and supplemental questions, such as mental health supports available for students at the school,

engagement with mental health support staff members, and participant mental health knowledge needs was used to support findings.

Insufficient

The primary theme developed from participant responses related to the effectiveness of training they have received about MHL, is that training was insufficient. Specific indicators of training insufficiency yielding five subthemes were (a) a lack of impact and meaning, (b) inconsistent delivery, (c) brief, (d) informal format, and (e) a lack of follow up support following training opportunities.

Lacks Impact and Meaning. When participants were asked to describe mental health trainings they have participated in, 100% of participants struggled to provide specific details and shared vague commentary, suggesting a lack of impact and meaning from provided training. To support this finding, Claire stated, “honestly, I don’t remember,” Max stated, “I can’t remember,” and “trainings of like buzz words,” Kelly stated, “I honestly don’t remember,” and “general messages,” Timothy stated, “I don’t really remember,” and “not particularly meaningful,” and Sarah stated, “I don’t think I’ve had any PD in that.”

Participants were also asked about their mental health knowledge needs and 100% of participants discussed the need for additional training, which further supports the lack of impact and meaning from training they had received. Specifically, Claire stated, “more training,” Max stated, “more available, convenient PD,” and “PD would be good,” Kelly stated, “probably need training,” Timothy stated, “need a training,” and Sarah stated, “we could all benefit from more training.” With all participants stating they needed more training and were unable to provide details from trainings they have received reveals strong support for the lack of impact and meaning from these trainings.

Inconsistent. Four out of five participants expressed that mental health trainings have been inconsistent throughout their teaching careers. Only Claire expressed that, “various different trainings” had been provided via, “direct instruction from our counseling team.” Claire as the exception is important to note, as when probed further, Claire divulged that she is related to a current school counselor. This finding suggests that close relationships with support staff, such as school counselors, can impact a teacher’s perception of mental health trainings.

The remaining four participants, each mentioned one training they remembered many years ago and only two participants mentioned recent training. Specifically, Max stated, “8 to 10 years ago,” Kelly stated, “5 or 6 years ago,” Timothy stated, “4 or 5 years ago with suicide prevention,” and Sarah stated, “a district one 13 years ago.” Related to recent trainings, Timothy mentioned, “this year was one about when to respond and how to contact people,” and Sarah mentioned, “recently at a faculty meeting.” Of the four participants that mentioned trainings from years ago, none mentioned any training opportunity in between that time and the present, thus reflecting a lack of consistency with training opportunities across participants’ careers.

Brief. Through responses, each participant spoke to the brief nature of mental health trainings either directly or indirectly. Of the five participants, three made a direct comment related to the time spent on the trainings. Specifically, Max stated, “hour-long sessions or things like that,” Kelly stated, “like half day,” and Sarah stated, “brief talk.” The other two participants spoke indirectly about time through a description of format that is typically of short duration, as Claire stated, “faculty meeting,” and Timothy stated, “online videos and quizzes.” None of the participants mentioned a full day, multiple days, or any follow up sessions from the provided trainings, thus revealing all trainings received were brief in nature at a half day session or less.

Informal. In terms of the overall methods and formats for the delivery of trainings, four participants either directly or indirectly described training opportunities as informal in nature through the use of vague language or a focus on available content and supports verses explicit delivery of focused content. Specifically, Claire stated, “training at own pace.” Max stated, “stuff has been available.” Kelly stated, “no formal class,” that opportunities have been “sort of like professional development,” and “explicit mental health professional development, I don’t think I’ve seen any of that.” Sarah stated training has, “addressed some issues,” and that she has “heard from a guidance counselor about understanding we can go to them.” Clearly, the training experience of these four participants reveals a lack of formal structure or delivery of mental health content.

Lacks Follow Up Supports. Participants were asked questions related to engagement with support staff members, mental health supports available for students, and follow up supports from trainings. When asked directly about follow up supports received following training opportunities, 100% of participants responded in ways that reflect a lack of immediate, consistent, and meaningful supports. Regarding supports received, Claire stated, “not a lot,” and Max stated, “there hasn’t been much,” “it doesn’t seem like there’s much follow up,” and “had to seek it out.” Kelly stated, “may have been, but I have no memory of it,” Timothy stated, “they ask follow up questions, but not a lot,” and Sarah stated, “not that I can think of.”

While participants were each able to describe some details related to mental health trainings received, such as time, format, and topic, the majority of commentary was vague and void of specific content descriptors. The subthemes that describe how mental health trainings had lacked impact and meaning, had inconsistent delivery, were brief and informal, and lacked

follow up supports, each supported the primary theme that MHL training received by participants was insufficient to their learning and understanding of MHL knowledge.

RQ4: How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

For Research Question 4, the researcher aimed to investigate how participants perceived the relationship between their knowledge of MHL and their work as high school AP teachers. Specific data was analyzed related to potential changes in their views of mental health and professional practice following training participation, as well as how participants have applied information gained during training sessions to professional practice. Additional background knowledge gained from the warm up questions related to overall mental health literacy was included in the findings.

Awareness and Understanding Impacts Teacher-Student Relationships

The primary theme developed from participant responses related to the relationship between their knowledge of MHL and their professional practice was that awareness and understanding impacts teacher-student relationships. Each participant, or 100% discussed increased awareness or understanding related to changes in views of mental health or professional practice. Specifically, Claire stated, “made me more aware of it.” Max stated, “brings my attention, brings me more attentive to it.” Kelly stated, “just being, maybe extra aware.” Timothy stated, “better notion of what I need to do,” “I understand the procedural stuff now,” and “my understanding of my role in responding to it.” Sarah stated, “I’m continuing to be more aware.” However, despite increased awareness and understanding, when probed further, all five participants discussed uncertainty about the reasons for changes. To support this finding, Claire said, “not sure if it’s because of training.” Max said, “I don’t know if it’s explicitly from

the training or if it's like all around." Kelly said, "probably not much," and "things I already know." Timothy said, "I don't think it really has, I honestly don't. It's more about the cultural stuff going on in the world. There's a broad awareness." Sarah said, "I've always been concerned about it," and "I don't think that's [viewpoint] really changed."

The similar responses by all participants above suggest the significance of mental health awareness and understanding, the lack of impact and meaning gained from mental health trainings, as well as the impact of personal experience and societal influence on the relationship between teacher MHL knowledge and professional practice. Despite varied reasons for the increased awareness and understanding about mental health, three subthemes emerged to indicate that awareness and understanding impact student-teacher relationships through teacher actions of flexibility, response, and communication.

Flexibility. The two participants that spoke in greatest detail to specific ways their view of mental health or professional practice have changed as a result of increased awareness and understanding, described ways they have become more flexible as a teacher in their approach to working with students. Claire stated:

To be able to customize things like deadlines, and understanding attendance and focus, be more aware of that and I think it's made me a better practitioner, um, because I get it a little better.

This statement by Claire speaks to the connection between awareness, understanding, and teacher flexibility related to assignment deadlines, attendance, and student engagement in the classroom. Max explicitly discussed the theme of flexibility through statements such as, "I've become a lot more lenient," and "easing off of that, pressure, uh, having to be flexible, to a

certain amount of time to turn in.” Max elaborated on this teacher action and connected understanding with flexibility by stating:

They might express how overwhelmed they are, might not even be explicit to me, like this class is overwhelming, then I’d say well, you know, this is due tomorrow, but you know, or today’s Friday, and you know, just turn it in Monday. I understand you’ve got a lot going on.

Both Claire and Max described specific teacher actions related to flexibility. While the other participants did not mention this action explicitly, this is more likely due to their going into less depth with their responses, rather than maintaining an opposite perspective.

Response. The response subtheme was arguably the strongest one as 100% of participants described specific teacher response actions that have changed as a result of increased awareness or understanding. Specifically, Claire mentioned, “I’ve learned it’s ok to cry in AP and sometimes I cry too,” and a further comment by stating:

I’ve had more conversations with counselors about how isolation has impacted them.

Trying to create a space in my little universe here to help kids feel a little safer.

Max also made statements reflecting teacher response actions related to increased awareness such as, “observe and become more alert,” and “look out for things and pick up on clues and adjust in that way.” Furthermore, Kelly stated, “just warning signs and, you know, making sure you address them.” Timothy related understanding to teacher response action by stating, “my understanding of my role in sort of responding to it,” and further elaborated on this notion by stating:

There’s such a broad awareness that I probably use mental health stuff to explain things more often than I would, that’s true, because I know that they know so much about it, and

that's something that I don't have a lot of, when I go to explain things to my kids, there's not a lot of universal basis, so that does tend to sort of fill in the gap.

This statement by Timothy also speaks to the connection between universal awareness, and how teacher response and communication impacts the teacher-student relationship as well as student learning. Sarah also discussed teacher response actions by stating, "reminding myself to be aware of what we're hearing, what they're showing or telling," and "reminding myself to be available." While not explicitly stated by Sarah, being available is a needed teacher action to support communication between teachers and students.

Communication. The other four participants explicitly mentioned changes with communication resulting from increased mental health awareness or understanding. Specifically, Claire said she has had, "more individual conversations with students when [students are] stressed or anxious," and Max said, "being able to have those conversations with them opens that door, they know they can approach me and say, well these are the issues I'm having, can we can work something out," as well as providing an example related to a teaching classroom practice:

I think, and understanding, and I think, providing ways for students to express issues they might have in an easier way, like, um, I'll address, I'll ask questions, just personal levelish type of questions to my students to kind of open up the communication.

Additionally, regarding the theme of communication, Kelly said it is important to, "make them feel comfortable with talking to you." Timothy further mentioned the importance of the connection between awareness and communication between teacher and students by stating,

And my awareness that they're aware of these things [mental health topics], allows me to use those as ways to express those things. I do a whole thing in my class about the

collapse of universal systems. There's not a lot of shared references. Mental health concepts are universal and are known by every person in the room.

As stated, each participant mentioned an increased awareness and understanding of mental health concepts in recent years, as well as spoke to aspects of the teacher-student relationship, thus suggesting the impact and connection between the two constructs. While participant responses revealed various factors contributing to increased teacher mental health awareness and understanding, such as societal influence and personal experience, we cannot discount the potential changes to participant views and professional practices that may have resulted directly from mental health trainings.

Summary

In summary, this chapter included a participant demographic summary to add context, as well as provided a detailed analysis of participant responses to the four study research questions. The research questions examined participant understanding and perception of their MHL knowledge base, how they develop their MHL knowledge base, the effectiveness of training they have received, and the relationship between their MHL knowledge and professional practice.

The study aimed to analyze participant responses to answer the four research questions. The researcher found numerous commonalities across interview data that yielded rich themes aligned with each research question. Additionally, Vygotsky's sociocultural theory (Vygotsky, 1978) guided the interpretation of study findings, as numerous references were made to the social structures and processes that shaped participant mental health literacy knowledge and understanding, the situational specificity of teacher practice, and teacher-student interactions. The next chapter includes implications corresponding with the study findings, as well as recommendations for future studies, research, and practice.

CHAPTER 5: DISCUSSION

Summary of Findings

The Chapter 5 discussion includes a review of the research study problem, purpose, methods, and ethical considerations that were followed and completed. A detailed discussion of the findings by each research question is also outlined in this chapter with connections made to existing literature. The chapter concludes with research study implications and recommendations for future practice, policy, and research related to MHL for high school AP teachers.

With rising rates of adolescent mental health presenting as a growing area of concern in U.S. public schools, (Boak et al., 2016; Centers for Disease Control, 2019; Merikangas et al., 2010) teachers and schools can serve as primary intervention agents and sites. However, recent research shows that teachers have limited knowledge of overall student mental health that is needed to support students (Osaigiede et al., 2018; Weston et al., 2018; Reinke et al., 2011).

Mental health literacy (MHL) holds promise as one means for reducing stigma and increasing access to high quality mental health care among adolescents. (Flaspohler et al., 2008; Mendenhall et al., 2009; Weston et al., 2018). Also, with current MHL competencies being developed within the past decade, there is a limited body of research that has investigated MHL and training methods among teachers (Frauenholtz et al., 2015; Whitley et al., 2018). Therefore, this study sought to further understand the current public education teacher knowledge base regarding MHL, ways they developed this knowledge base, effectiveness of MHL training, and how their MHL knowledge related to their professional practice. Finally, with students in high achieving schools (HASs) recently being deemed an “at-risk” population, and with little research specifically focused on high school AP teachers’ MHL, this study sought to further investigate high school AP teachers’ understanding of MHL within the context of a HAS.

The purpose of this basic interpretive qualitative study was to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy. The aim of Chapter 5 is to discuss the study findings and how they contribute to the understanding and perceptions of public high school AP teachers in HAS regarding MHL knowledge.

The data for this study was collected through individual participant in-person, semi-structured interviews. For recruitment, each of the 20 teachers at the selected site school that teach AP courses were presented with information about the study by a counselor at the school. Out of the 20 teachers, five teachers representing four departments agreed to participate by committing via email to follow up correspondences provided by the researcher. The researcher sent each participant a Google Form demographic survey to complete one week prior to the interview. The semi-structured interviews were conducted with each participant and interview transcriptions were shared via email along with a member checking protocol. The survey information, interview transcriptions, and member checking protocol responses provided multiple sources of data to assist the researcher with developing findings.

According to Mertens (2015), following ethical principles through an approval process with an institutional review board (IRB) throughout a research study is a required step. IRBs are responsible to monitor compliance with the three ethical principles of beneficence, respect, and justice. These principles were considered by the researcher during each stage of the research study to ensure the protection of each human subject.

This study was in full compliance with the IRB review process at UNC Charlotte and protected human subjects in several ways. The researcher exercised care to participants by providing written and verbal notification of the voluntary nature of the study through informed consent. Moreover, there was minimal risk to participants, as there was no exposure to physical

or psychological harm or experimental treatment. There were no penalties to participants if they chose not to participate in portions of the interview or to withdraw at any point during the study. Also, participants were given a pseudonym to ensure confidentiality, and no information about the participants was shared by the researcher with the participants' schools, school districts, or the North Carolina Department of Public Instruction (NCDPI). All study data, was stored in secure cloud storage through the UNC Charlotte.

In this study, the researcher engaged in several actions to support trustworthiness, as establishing truthfulness and confidence in all aspects of the study is needed in qualitative research (Lincoln & Guba, 1985). First, the researcher engaged in debriefing with the dissertation chair and methodologist to consider trustworthiness throughout the research process. Next, the researcher used a predetermined set of semi-structured questions on the interview protocol aligned with the research questions and a pilot interview was conducted to further strengthen the trustworthiness of the tool. The researcher also engaged in member checking, or sharing verbatim interview transcriptions with participants, allowing them to view, confirm, and provide additional insight into their responses. Furthermore, the researcher was intentionally immersed in the collected data for an extended time throughout the study via multiple readings of the interview transcriptions and by following a thorough coding processes. Finally, the researcher incorporated multiple data collection sources, including recorded field notes during each interview, as well as reflexive journaling following each interview.

This study built upon the limited research and literature regarding teacher MHL within HASs and provided detailed data to inform current and future secondary and postsecondary faculty and staff about the current state of teacher mental health knowledge as well as effective practices for training. Additionally, there has been a limited emphasis in research given to the

urgent need to educate teachers about adolescent mental health or to develop MHL, which is a central component to attaining the implementation of optimal mental health service for students (Flaspohler et al., 2008; Frauenholtz et al., 2015). Moreover, with research showing general low levels of MHL, additional analysis of this construct was warranted. Therefore, the current level and development of a MHL knowledge base of high school AP teachers, the effectiveness of training, and the relationship between MHL knowledge and professional practice were all significant issues investigated throughout this study.

The theoretical framework of this study was developed around Vygotsky's sociocultural theory based on the notion that social structures and processes shape an individual's mental functions and learning process (Vygotsky, 1978). Vygotsky's sociocultural theory guided the development and execution of the research and interview questions, as references were made to the social structures and processes that shaped participant MHL knowledge and understanding, the situational specificity of teacher practice, teacher-student interactions, and the cultural context of a social high school environment. Finally, findings conducted through inductive data analysis were analyzed alongside sociocultural theory to strengthen the clarity of the identified themes.

The results of this study indicated that public high school AP teachers experience feelings of inadequacy related to MHL knowledge and their knowledge is primarily based upon common knowledge from society. The teacher participants developed their MHL knowledge gradually and experientially across time and settings, with personal experience acting as a facilitator. The MHL training received by the teacher participants has been insufficient, as it has lacked impact and meaning, has been inconsistent and informal, and has lacked follow up supports. Finally, regarding the relationship between teacher participant MHL knowledge and professional

practice, results revealed that teacher awareness and understanding impacts teacher-student relationships through flexibility, response, and communication.

Discussion of Findings

RQ1: What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?

This study found that the MHL knowledge base of high school AP teachers is primarily based upon common knowledge gained from the influence of society. Overwhelmingly, throughout participant interview responses, there were numerous references to the increased awareness and discussion of mental health topics in recent years in schools as well as the world around us, including the media. This notion has provided opportunities for these teachers to include mental health topics in class discussions with students.

However, while mental health discussion opportunities and awareness have increased, study participant responses strongly reflected feelings of inadequacy. Specifically, each participant used language that reflected limited mental health knowledge and low levels of MHL. Participants used cautious language throughout and were unable to clearly define three of the four components of MHL. The one component that participants were most knowledgeable about was positive mental health for both students and self. Participant responses related to this component were common, quick, detailed, and specific. This finding reveals that these high school AP teachers know how to model for and support students with self-care and strategies to deal with life stressors.

In contrast, the significant lack of teacher knowledge related to the other three MHL components, including (a) mental disorders and treatments, (b) stigma related to mental disorders, and (c) when, where, and how to seek help for mental health needs, is an important

finding that directly relates to existing literature. Recent research shows that teachers have limited knowledge of overall student mental health and often do not know how to address student mental health needs within the classroom (Osagiede et al., 2018; Weston et al., 2018; Reinke et al., 2011). Further studies show that low MHL may prevent teachers from collaborating with one another or appropriately responding when needed (Frauenholtz et al., 2017). The lack of teachers' ability to articulate the identification of mental health disorders and action steps supported the study's finding that teachers play a limited role in student mental health intervention. It is worth considering that the low levels of teacher MHL knowledge found in this study represent a missed opportunity to capitalize on collaboration when supporting students.

Additionally, as the majority of teacher participants discussed the limited role they play in supporting student mental health needs, they instead rely on trained professionals and refer students out to support staff that they view as trained experts. This finding directly relates to existing literature about the significant role that mental health professionals play in schools to support students. Recent studies reveal that school mental health professionals, including school counselors, nurses, school psychologists, and social workers that have specialized knowledge of student mental health problems and interventions and can provide the mental health training for staff and services needed to support students mental health needs (Frauenholtz et al., 2015; Frauenholtz et al., 2017; Marsh & Mathur, 2020).

However, the finding from this study about the limited role teachers play in student mental health intervention is contrary to findings in existing literature related to the critical position and role teachers can play to support students with these needs. Teachers are often the first school staff members to observe behavior that shows the development or worsening of

mental health problems (Whitley et al., 2018). Recent research supports teacher recognition and understanding of their role in supporting students with mental health care needs due to the impact these issues had on student learning (Maelan et al., 2018). Recent research also shows that teachers can learn specific skills to communicate more effectively with students and recognize early risky behavior patterns within the classroom to help identify students in need of mental health support and services (Kirby & Keon, 2006; Lindo et al, 2014).

The study findings also directly relate to Lev Vygotsky's sociocultural theory and the idea that individuals learn through experiences and social interactions. (Vygotsky, 1978). Participant responses compellingly reflected that mental health knowledge is related to what they see and experience in society. Additionally, the mental health awareness gained by the high school AP teachers has provided opportunities for class discussion with students. Vygotsky's theory includes the zone of proximal development, or the internalization of learning, as individuals can master new skills, practices, and ways of thinking with the guidance of skilled teachers and through peer collaboration (Levine & Marcus, 2007). The teacher participants discussed how they capitalize on these opportunities to engage with students and provide peer-to-peer discussions related to mental health topics. While teacher participants in this study utilize collaboration within the classroom, collaboration with one another outside the classroom was not a commonly mentioned practice or one that was reported to be impactful.

RQ2: How do high school Advanced Placement teachers describe the development of their knowledge base regarding mental health literacy?

This research showed that the development of the MHL knowledge base for high school AP teachers is gradual and experiential. The majority of teacher participants referenced time and childhood experiences in relation to their understanding of mental health. The references were in

the form of personal stories or the name of a class, with little details provided. Overall, participant comments related to mental health knowledge from childhood experiences were few and vague, reflecting a general word or topic and limited impact on understanding. These findings could be attributed to a lack of MHL education for participants during their early years, to less focus on the topic in society and the media at the time, or a combination of both points.

Participants in this study were able to list the names of pre-service courses they experienced from college or graduate school related to mental health topics, but unable to provide descriptive details. The pre-service content mentioned was isolated to one or two courses, and not integrated across other courses. These findings suggest that at the time participants engaged in pre-service coursework over 10 years ago, mental health content was not an integral component of teacher preparation programs throughout courses.

Teacher participants also discussed the development of their MHL knowledge while employed as a teacher at the school-level, with the primary focus of content being directly related to situational student needs. Participants were able to describe specific professional development sessions related to current student needs such as SEL. When considering participant responses related to MHL knowledge development from childhood to the present, responses became more descriptive and detailed over time as participants approached present experiences. It is worth considering that the increased awareness of MHL knowledge from participant's recent years could be related to the increased societal awareness of mental health topics that participants mentioned, to easier retrieval of current information from participant's memories, to recent specific trainings, or a combination of all three possibilities. However, the gradual nature and overall lack of comprehensive content delivery across time from participant's childhood, to pre-

service education, to current employment lends strong support to the general low levels of MHL found in all participant responses.

In terms of the relation of RQ2 findings to existing literature, it is not surprising that study participants struggled to provide detailed content or processes related to the development of their MHL knowledge, as MHL competencies have been developed within the past decade. As a result, there is a limited body of research that has investigated MHL among teachers (Frauenholtz et al., 2015), and there has been limited emphasis in research on the urgent need to educate teachers about adolescent mental health (Flaspohler et al., 2008; Mendenhall et al., 2009; Weston et al., 2018). With all study participants being employed as a teacher for over 10 years, the lack of emphasis on MHL content during their early and pre-service education was likely attributed to the lack of emphasis on this construct in previous decades. Worthy of consideration is how mental health content delivery has changed throughout K-12 and post-secondary education over the past several decades and in recent years.

In relation to Vygotsky's sociocultural theory and the idea that learning occurs through social interactions, some participants described childhood mental health learning experiences gained from social relationships, with Kelly articulating a specific personal story with a suicidal friend. However, in response to RQ2, participants failed to mention the development of mental health knowledge as part of the collaborative process with one another while employed as a teacher. This lack of recognizing teacher collaboration as a MHL tool reveals that the sociocultural theory's framework is not realizing its full potential, as according to Fullan (2002), "information only becomes knowledge through a social process." (p. 18).

Furthermore, as sociocultural theory considers multiple cultural contexts and situational specificity of teacher practice (Scott & Palincsar, 2013), study participants noted that the mental

health content delivered via training at the school-level related to the situational needs of students within the HAS setting. Therefore, while study findings revealed a focus on the cultural context and situational specificity related to the development of teacher MHL knowledge, findings were also in contrast to existing literature related to the impact of collaborative practices on teacher learning. According to Scott & Palincsar (2013) and from a sociocultural perspective, learning occurs through interaction, negotiation, and collaboration. Clearly, there is a missed opportunity for teachers involved in the current study to benefit from regularly engaging with one another to gain a deeper understanding of the cultural context and specific needs of students within the setting of their employment.

RQ3: How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?

The findings from this study demonstrated that MHL training opportunities received by high school AP teachers was perceived as insufficient as these opportunities lacked impact and meaning, were inconsistent, brief, and informal, and lacked follow up supports. In terms of participant responses, all teachers provided vague responses and spoke to the lack of memory or meaning surrounding MHL training opportunities received, which yields strong support for the perceived insufficient nature of these trainings. This commonality was also found with the overwhelming evidence that these high school AP teachers need additional MHL training to be prepared to support students with mental health needs. All teachers spoke specifically about the need for additional MHL training.

In general, these high school AP teachers have not experienced MHL trainings that have been consistent, formal or of long duration of over a half day throughout their careers. This is not surprising as MHL has gained attention within the last decade and the teachers in the study have

been teachers longer than 10 years. It is also important to note, that the teachers in this study have spent the majority of their careers at the school in this study, with findings reflecting heavily upon what MHL training has been provided within this particular school and district.

In addition, Claire was an outlier in terms of providing the researcher with the most detailed account of trainings received. She also spoke at length about the relationships she has had with support staff at the school for guidance and partnership. Of noteworthy consideration, however, is that Claire divulged that she is related to a current school counselor. It is likely that this relationship and collaboration with support staff at the school and within the district has impacted her memory of MHL training topics, format, and descriptions. Recent research shows that collaborative interactions among teachers and mental health professionals are needed for the success of early student mental health intervention and for developing high levels of MHL (Luthar et al., 2020).

There were other strong connections between study findings and existing MHL literature. As recent studies reveal that teachers lack knowledge and training on how to address youth mental health in classrooms, (Osagiede et al., 2018; Reinke et al., 2011) teachers in this study also reported that MHL training opportunities have been insufficient to supporting their understanding of overall student mental health needs and interventions. While teachers in this study discussed the societal impact on increased mental health awareness and how they have increased discussion on this topic within their classrooms, their knowledge of how and when to appropriately intervene was primarily unknown. This notion has led the high school AP teachers to rely upon the highly trained support staff for guidance with supporting students.

Of concern to high school AP teachers and worth noting was that there was a lack of follow up supports from training. Given the research supporting the effectiveness of

collaboration among teachers and with school mental health professionals (Anderson-Butcher et al., 2010; Rodger et al., 2018), it is surprising that mental health support staff provided minimal follow up support and that the teachers did not pursue the additional support available. This lack of pursuit of additional support steps following training was clearly a missed opportunity for learning, feedback, application, and general building of MHL knowledge. This was a particularly interesting finding considering this study took place on the heels of a global pandemic through which one would assume that many educational professionals experienced heightened awareness of the impact of social isolation on the mental well-being of self and students.

Furthermore, as Vygotsky's sociocultural theory involves the notion that learning occurs through interaction, negotiation, and collaboration (Scott & Palincsar, 2013), this theory also speaks to the missed opportunity for teachers in this study to engage with mental health support staff following MHL training. The provision of little to no additional collaboration following MHL training for teachers in this study likely contributed to their overall low levels of MHL knowledge.

There were additional findings from this study that were contrary to literature. A systematic review of 21 studies related to the effectiveness of MHL training programs for school professionals by O'Connell et al. (2021), found that the majority of programs were effective at increasing participant mental health knowledge, even when training for as little as two hours. While it is evident that MHL training can be effective within a short, two-hour session, it is important to note that the programs reviewed were comprehensive in nature, reflecting all MHL components. Teachers in the current study overwhelmingly reported that MHL trainings received were primarily focused on a current student mental health topic, lacked formality, and failed to

cover all MHL components. This notion represents another missed opportunity, as research shows that comprehensive MHL trainings of short duration can build teacher MHL knowledge.

RQ4: How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

This research showed that these high school AP teachers made strong connections between MHL awareness and understanding and the student-teacher relationship. All study participants discussed an increased awareness related to changes in views of mental health and some of their resulting response actions, such as making observations and adjustments and being available. However, these high school AP teachers lacked clarity around the reasons for their changes in mental health views, with multiple possibilities being offered, including personal experience, societal influence, or training.

Regarding other specific teacher actions, there was significant evidence from the study that these high school AP teachers' communication practices with students have changed as a result of increased mental health awareness and knowledge. The increased mental health awareness they have experienced has encouraged them to engage in further questioning, individual conversations, and class discussions with students. These communication practices have provided a safe space for students to talk about mental health topics and concerns and for teachers to gain additional student mental health information to support students and make referrals to mental health professionals.

The specific teacher action of flexibility emerged as a sub theme and was discussed at length by Claire with an increase in MHL awareness leading her to customize deadlines, better understand student attendance issues, and focus more on student engagement in the classroom. As previously stated, Claire was an outlier in terms of providing the researcher with the most

detailed account of trainings received and sharing about her relation to a current school counselor. Therefore, it is worth noting that training and collaboration with mental health professionals could be significant contributors to Claire's increased mental health awareness and detailed changes in professional practice.

The connections between these high school AP teachers' MHL knowledge and their professional practice can also be connected to existing literature. As all participants noted that increased MHL awareness resulted in changes in teacher beliefs or actions, several studies that focused on improving teachers' knowledge of overall mental health revealed significant increases in mental health knowledge, attitudes, and a decrease in stigma (Eustache et al., 2017; Kutcher et al., 2016; Lasisi et al., 2017; Powers et al., 2014). While the high school AP teachers in this study were not able to clearly articulate the reasons for the changes in their mental health views or beliefs, they were able to connect their increased MHL awareness and understanding to changed beliefs and actions. In addition, the subtheme of the teacher action of communication that emerged yielded strong evidence of changed practices in how the high school AP teachers interact with students following increased MHL awareness and understanding. This notion is also supported in recent literature, as teachers can learn specific skills to communicate more effectively with students within the classroom to help identify students in need of mental health services (Lindo et al, 2014).

Another connection to existing literature is in relation to students within HAS settings and enrolled in AP courses experiencing stress and anxiety and resulting internalizing symptoms. The high school AP teachers in this study noted that students in their classes often feel overwhelmed, stressed, or anxious, with this revelation being directly linked with recent research. In a review of nine HAS cohorts of students, data showed high rates of serious

symptoms related to anxiety and depression (Luthar et al., 2020). Recent research of students enrolled in accelerated courses such as AP revealed that as students' levels of stress increase, their risks for both internalizing and externalizing symptoms increase. However, the symptoms often go unnoticed or are misunderstood (Suldo et al., 2009; Suldo et al., 2018). While all teachers in the study mentioned a need for additional training to strengthen MHL and support students, in contrast to recent literature, all participants mentioned increased awareness and communication with students regarding mental health concerns. This finding is in contrast to recent literature that has found that teachers in HAS settings that teach advanced courses often miss internalizing symptoms. One possibility worth considering is the impact that the recent global pandemic has had on heightened teacher awareness of increased student mental health symptoms and problems of stress, anxiety, and depression (CDC, 2022; Racine et al., 2020).

Finally, the study findings reveal strong connections with Vygotsky's sociocultural theory and the zone of proximal development, or the idea that teaching and learning is useful only when they move ahead of development and that learning occurs through a collaborative relationship between a teacher and a student (Scrimsher & Tudge, 2003). Study findings revealed that the increased MHL awareness and understanding of high school AP teachers impacted their relationships with their students in a positive way. Through changed teacher actions with flexibility, response, and communication, these teachers were able to learn more about the mental health needs of their students. When viewed through the lens of Vygotsky's theory and the zone of proximal development, it is likely that the high school students have also learned more about MHL through these collaborative teacher practices.

Implications

The results from this study provided numerous implications and recommendations for policy, practice, and future research in the field of MHL. For RQ1, these implications include the need for targeted MHL training for high school AP teachers to be developed, facilitated, and monitored. A specific focus should be on the three components of mental disorders and treatments, stigma, and when, where, and how to seek help for mental health needs as these areas reflected the lowest levels of MHL for the teachers in this study. Although participants did not openly mention stigma, it is an important component of MHL that supports overall mental health knowledge development. This need for targeted training related to these three components was stated clearly by Timothy, who said, “I don’t feel confident or trained to deal with them [students],” and “I’m always terrified that there’s too much information.” Therefore, focused training on areas of low MHL for teachers and being aware of and minimizing training content on areas of already high MHL could be an effective strategy for impacting the development of teacher MHL knowledge.

Additionally, as teachers in this study predominantly have a MHL knowledge base resulting from common knowledge and societal influence, utilizing and integrating current events and real life scenarios throughout training opportunities is a noteworthy consideration. As Timothy stated, “Honestly, I feel like almost everybody is more prepared to talk about mental health at this point than at any other point in history.” Also worth noting is that the strong evidence from this study regarding increased teacher awareness of mental health topics may be due in part to the recent global pandemic and exposure to the topic in the media, as well as observing visible symptoms within self and students. The notion of increased awareness and resulting practice of regular discussion of mental health topics in school that was mentioned by

the teachers in this study as a tool for communication with students also reflects Vygotsky's sociocultural theory and the idea that learning occurs through interaction, negotiation, and collaboration (Scott & Palincsar, 2013). Thus, training for teachers that includes interwoven collaborative opportunities both during training as well as collaborative practices to utilize with students in the classroom and with colleagues throughout the school could serve to positively impact their MHL knowledge base.

A final recommendation related to RQ1 is the need to increase the confidence of teachers and impact their view on the limited role they play in supporting the mental health needs of students by capitalizing on the relationship they have both with the students and with trained professionals. Teachers in this study overwhelmingly rely on trained professionals within the school for guidance with student mental health support. As Claire stated, "my first line of defense is the counseling team." These strong, collaborative relationships, reflecting Vygotsky's sociocultural theory of how learning takes place, can be a powerful avenue for future research and practice. Specifically, additional focus on impactful collaborative practices implemented among and between high school AP teachers and trained professionals within HASs is warranted. Future research should include an investigation of the cultural context of HASs related to collaborative practices.

To address practice, policy, and research suggestions related to RQ2, developing and implementing MHL training for teachers should be provided and monitored by leadership for effectiveness consistently over time. This recommendation is supported by the finding in this study that MHL knowledge is developed gradually over time by high school AP teachers. Additionally, as study findings revealed teacher MHL is developed experientially, MHL training

should include engaging and interactive learning opportunities, which is a core principal found in Vygotsky's sociocultural theory that support the transfer of learning.

In terms of pre-service content, recommendations for practice, policy, and research include the integration of MHL content across courses to reinforce opportunities for growing teacher knowledge in this area, as findings in this study strongly reflected the isolated nature of pre-service MHL content. As Timothy stated, "I just felt like there was a deficit, of, I mean I only had one course in college that was in regard to mental health."

One further recommendation for practice, policy, and research related to RQ2 is for district and school leaders to develop, implement, and monitor school-level MHL training content that is comprehensive in nature. Findings in this study were that school-level MHL content was situational in nature and based primarily upon specific student situations or needs. However, several studies in secondary schools involving the completion of targeted and comprehensive training for teachers called *Mental Health First Aid*, found associations between advanced mental health knowledge, increased helping behaviors, and reduced stigma attitudes (Jorm, 2012; Wei et al., 2012). Including comprehensive MHL content related to multiple components can support knowledge development in this area as research has found.

To address practice, policy and research involving RQ3, and the finding that current MHL training for high school AP teachers was insufficient, additional research is warranted to determine the effectiveness of various formats of MHL training, including the program or curriculum used with this population of teachers within HASs. In this study, high school AP teachers experienced MHL trainings that were inconsistent, brief, and informal, which significantly contributed to a lack of impact and meaning, or growth in MHL knowledge as a

result of the trainings. All study participants struggled to provide specific details about trainings received and all argued for the need for more MHL training or professional development.

Further implications for the delivery method of MHL content during training opportunities should be considered. As current research on how the brain learns (Sousa, 2022) includes insightful recommendations for the transfer of learning by including practices such as arts integration, music, movement, humor, critical thinking, and emotion when teaching or training. These practices promote learner engagement, which was desired by, but not present in the trainings received by the teachers in this study.

Additionally, a lack of follow up support after training also contributed to insufficient knowledge gained by the teachers in this study. As this study also found that teachers gain MHL knowledge gradually over time and through collaborative experiences, ensuring MHL trainings include consistent follow up support and monitoring by trainers should ensure learning has occurred and new practices are implemented with fidelity. This recommendation is also supported in current research that shows collaboration and positive connections as a component of MHL can support effective and ongoing attention to adolescent mental health needs (Short et al., 2018). Additionally, peer coaching is a type of support system and practice that numerous studies show effectively impacts teacher learning and growth (Stormont et al., 2015).

In terms of recommendations for research, there is an urgent need to study and determine the long-term impact and sustainability of MHL training opportunities to ensure they are effective for all teachers' growth in MHL knowledge. Much current research has shown increases in teacher mental health knowledge in the short-term following training, however, how this training impacts their future actions has yet to be determined (Whitley et al., 2018). Several systematic reviews on mental health training programs for teachers such as the one by Anderson

et al. (2019), argue for the need for further, rigorous research to determine what training programs or modalities can change teacher behavior or improve student mental health outcomes in the long-term.

For RQ4, given the strong connection found in this study between mental health awareness and understanding and the impact on teacher-student relationships, future practice, policy, and research should focus on the teacher actions that impact these relationships within HASs. Specifically, this study found high school AP teachers became more flexible, responsive, and communicative with students as they gained mental health knowledge. Recommendations for future research include studying the extent to which these teacher actions as well as additional teacher actions promote effective student mental health intervention practices as well as student stress and mental health levels within HASs. Future research should also focus on student actions and help-seeking behaviors that may result from these teacher actions as help-seeking behavior is a key component of high MHL. Further study of the dynamics of the teacher-student relationship and the impact of teacher and student actions could provide further insight into how Vygotsky's sociocultural theory aligns with learning MHL knowledge.

Additional implications for practice, policy, and research exist beyond the four study research questions. One interesting piece of data collected from the participant survey responses related to parental educational level revealed that 4 out of 5 participants had earned higher education degrees than their parents. With Sin et al. (2016) finding that education level was a significant predictor for better mental health knowledge, further study of the connection and impact that higher education has on a teacher's ability to gain MHL knowledge is a noteworthy consideration. Future studies could investigate advanced degree programs and certifications and how they may relate to improved MHL knowledge and practice.

While this study yielded powerful results related to the current state of high school AP teacher MHL within a HAS setting, the study participants were all employed for the majority of their teaching career at one HAS, and the majority were Caucasian and had many years of teaching experience. By expanding the scope of high school AP teacher MHL to include additional school sites, a more demographically diverse sample of teachers in terms of ethnicity and teaching experience, further rich data could be obtained to inform MHL practice and policy. Specifically, information gained could guide the development and facilitation of impactful pre-service and post-secondary MHL coursework as well as school-level MHL training content for high school AP teachers. Findings could also inform varied needs for differentiated training based upon regions, ethnic populations, or level of experience of teachers. Gaining a greater understanding of the effectiveness of varied MHL training opportunities could also inform funding efforts for MHL training within colleges and universities as well as public high schools.

Conclusions

With adolescent mental health continuing to be a growing area of concern as seen in recent literature and in the researcher's own experience working at a district office in K-12 public schools, the urgent call to gain a greater understanding of teacher MHL was answered by the researcher in this study. Additionally, with the researcher's understanding through experience within various HASs joined with current research revealing students within HASs and enrolled in advanced courses are deemed "at-risk" for mental health issues due to stressors, this study was designed to focus on the MHL of teachers that work with this population of students. Thus, the purpose of this basic interpretive qualitative study was to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy with a goal of informing MHL practice, policy, and research.

Study interview questions, collected data, and findings were all guided by and analyzed through the lens of Vygotsky's sociocultural theory. Teachers in this study have learned about MHL through social experiences that changed their practice. They now regularly include collaborative discussion for students within their classrooms to support increased opportunities for engagement and learning about student mental health needs. However, while teachers in this study support student mental health need by relying upon and regularly referring students out to trained support staff, they fail to capitalize on social collaboration opportunities with these trained professionals and one another to further promote MHL knowledge acquisition.

The findings from this study revealed numerous implications and recommendations including the urgent need to develop comprehensive MHL content for school-level trainings for teachers as well as for pre-service and post-secondary coursework that is integrated throughout these programs. Of equal importance is the need to create MHL content that is engaging and promotes the transfer of learning for teachers, as well as to further study current and future MHL content and programs for effectiveness in both the short-term and long-term. Finally, future practice, policy, and research, should focus on the student-teacher relationship and how student and teacher actions relate to the development of MHL knowledge and ultimately, impact effective adolescent mental health intervention.

Worthy of consideration are challenges that exist in relation to these recommendations. With trained support staff in schools experiencing high student caseloads, time and ability to develop, facilitate, and provide ongoing monitoring for school-level training could be difficult. There are also potential funding challenges for research to be conducted at both the public high school level as well as college level. Public schools are currently experiencing budget constraints with a need to cut expenditures. Policy makers and those involved in school financial decisions,

therefore, need to be made aware of the current findings related to teacher MHL. As there are many critical topics at the forefront of public and post-secondary funding discussions and decisions, obtaining the opportunities for dialogue and presentation of this information could pose a significant challenge.

However, through studies such as the current one, additional information is added to the field of high school teacher MHL that can be shared and analyzed with a goal of encouraging additional research on this topic as well as changes to teacher practice and policy. By expanding the scope of study in this field to include additional schools, a more diverse pool of teachers, and additional constructs, valuable data can be gained to address the adolescent mental health crisis in U.S. public HASs.

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APPENDIX A: INTERVIEW PROTOCOL



Project Title

An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers

Structure

This is a semi-structured one-on-one interview with seven (7) open-ended warm-up questions, fourteen (14) open-ended interview questions aligned directly with the research questions, and two (2) open-ended supplemental questions. The interviewer may ask probing questions if needed for clarification or to gain additional information from the interviewee during the interview process.

Procedure

1. The researcher will find a secure, comfortable, and appropriate space and meet the interviewee at the time and location selected by the interviewee to conduct the interview.
2. The researcher will ask the interviewee to complete the 14-question demographic survey (see Appendix E).
3. The researcher will ask if the interview may be audio recorded and if field notes may be taken by the researcher.
4. If the participant verbally provides his/her consent (paperwork has already been collected), the recording will begin.
5. The researcher will ask the interviewee questions found in the protocol as well as additional probing questions if needed.

Interview Guidelines

Thank you for agreeing to participate in an interview as part of this research project. The purpose of this study is to investigate the perceptions of high school Advanced Placement (AP) teachers in high achieving schools (HAS) regarding mental health literacy. I will ask you a series of questions. Your name will not be reported to ensure confidentiality. You are not required to answer any questions that you do not feel comfortable with and you are encouraged to answer freely as there are no wrong answers. You may choose to decline to participate in the study at any time before, during, or after the interview with no penalties applied. Following the interview, I will transcribe the interview, by typing verbatim both of our statements and responses. Do you have any questions? Please confirm that you understand the interview guidelines and that you are ready to proceed.

- If the interviewee states no, the researcher will stop the interview and ask whether the participant is willing to be interviewed at another time.
- If yes, the researcher will continue the interview according to the protocol.

Research Questions

1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?
2. How do high school Advanced Placements teachers describe the development of their knowledge base regarding mental health literacy?
3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?
4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

Interview Questions

Warm-Up Questions

1. In your own words, how would you describe adolescent mental health?
2. Are you aware of current mental health supports available for students at your school and if so, what are they?
3. Do you ever engage with staff members whose primary role is student mental health support? If so, please describe these conversations.
4. Tell me how comfortable and/or confident you are when discussing the topic of adolescent mental health.
5. What mental health knowledge do you believe is essential when considering a long-term career as an educator in support of students?
6. Tell me how you would define mental health literacy.
7. Why did you agree to be in this study?

RQ1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?

1. What can you tell me about positive mental health?
2. What can you tell me about mental disorders and their treatments?
3. What can you tell me about stigma related to mental disorders?
4. What can you tell me about when, where, and how to seek help for mental health needs?

RQ2. How do high school Advanced Placements teachers describe the development of their knowledge base regarding mental health literacy?

1. What can you tell me about how to obtain and maintain positive mental health?
2. In what settings were you first informed about personal and/or adolescent mental health?
3. What tools or resources were provided to you to assist with your understanding of mental health?

RQ3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?

1. What trainings related to mental health have you participated in within your school or district and/or outside of the school setting?
2. What training methods and formats were used to deliver these trainings?
3. Of the methods and formats used, which ones did you find most beneficial to your learning and why?
4. What can you tell me about any follow up supports from trainers or school staff following training opportunities?

RQ4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

1. Has your view of mental health changed as a result of mental health training participation? If yes, please describe these changes.
2. Has your professional practice changed as a result of mental health training participation? If yes, please describe these changes.
3. What can you tell me about the application of information gained during training sessions to your professional practice?

Supplemental Questions

1. What do you need specifically to become more knowledgeable about adolescent mental health intervention?
2. What do you need in general to become more knowledgeable about mental health literacy?

APPENDIX B: RECRUITMENT PROTOCOL



“An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers”
Emily K. Kraftson / UNC Charlotte / Educational Leadership Department

Hello _____ this is Emily Kraftson, a UNC Charlotte Doctoral Student, and I am completing a research study entitled “*An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers*.” The purpose of this research study is to investigate the perceptions of high school Advanced Placement teachers in high achieving schools (HASs) regarding mental health literacy. (AP)

In your role as a high school AP public education teacher, I would like to ask you to participate in an audio-taped interview on this subject. You have been selected because of your status as a high school AP public education teacher within a HAS setting and teaching at least one AP course. It is your choice to participate in this research study, as participating is voluntary and choosing not to participate will not affect your employment or have any negative consequences.

Your participation in the project will take approximately 45 minutes-to-1 hour, to allow time for demographic survey completion and the interview. Each of your responses will be recorded verbatim by me following the interview and an interview transcription will be created and shared with you via email. You will also have the opportunity to verify your comments as they appear in the final work product or to follow up on any details. I will also take a few field notes during the interview to ensure clarity and understanding. If you choose to participate, you will be one of approximately 5 participants in this study. I am happy to arrange the interview at a time and place selected by you to ensure comfort.

To ensure confidentiality, information about your participation, including your identity, will not be shared. The data collected by the researcher will not contain any personal identifying information or reveal your participation in this study. Also, I request that you not use identifying information of fellow school district colleagues, immediate co-workers, students, parents or others during the interview to ensure anonymity. Please let me know if you have any questions.

At this time, you have three options. First, if you are interested in participating in the study, please confirm with me now by responding via email. Second, if you would prefer not to participate in the study, please confirm with me now by responding via email. Third, if you have questions or need additional time to consider participating in the study please confirm with me now by responding via email. For the third option, you are welcome to view the attached consent form that outlines study participation, to provide you with time to review it and help you make an informed decision. You would then be free to follow up with me via phone and/or e-mail to indicate your choice. All interested participants will receive a follow up email with information to schedule the interview along with a *Google Form* demographic questionnaire to complete. Please let me know if you have any questions.

APPENDIX C: POSTRECRUITMENT PREINTERVIEW FOLLOW-UP E-MAIL SCRIPT



“An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers”
Emily K. Kraftson / UNC Charlotte / Educational Leadership Department

Thank you for agreeing to participate in the study, “*An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers.*”

This study is designed to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy. I am interested in understanding the extent of high school AP teachers’ knowledge base and how they develop this knowledge base regarding mental health literacy through training or other means. Furthermore, I’m interested in knowing how these perceptions and understandings impact the relationship between their mental health literacy knowledge base and their professional practice.

Please note and review the Informed Consent Form that is attached to the body of this e-mail prior to our interview. Additionally, I will bring a hard copy of this Informed Consent Form to our interview session for you to personally sign.

At this time, I would like to schedule the interview with you. Please reply to me with date and time options as well as preferred location within your school. Also, please complete the [Google Form](#) prior to coming to the in-person interview. You are welcome to reach out to me directly with any questions you may have via e-mail or phone.

Researcher:

Emily K. Kraftson
ekraftso@uncc.edu or (704) 776-6631

If you have any concerns regarding this study, please contact the faculty advisor of the researcher.

Faculty Advisor:

Dr. Rebecca Shore
rshore6@uncc.edu or (704) 687-8867 ext. 4

APPENDIX D: CONSENT TO PARTICIPATE IN A RESEARCH STUDY



Title of the Project: *An Investigation of the Mental Health Literacy of High School Advanced Placement Teachers*

Principal Investigator: Emily K. Kraftson, UNC Charlotte

Faculty Advisor: Dr. Walter Hart

You are invited to participate in a qualitative research study. Participation in this research study is voluntary and the information provided is meant to help you decide whether or not to participate. You are welcome to ask questions at any time.

Important Information You Need to Know

- The purpose of this study is to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy.
- I am asking high school public education teachers, teaching at least one AP course in a high achieving school setting who are age 20 and older and employed full-time to complete a simple demographic questionnaire, a 1-on-1 interview about the topic and a brief follow-up email transcript confirmation. Please note confidentiality limitations with documents sent via email.
- Some of the questions I'll ask you may be considered as personal and sensitive given your connections to mental health. For example, I'll ask you about topics related to your personal mental health knowledge. These questions are personal and you might experience some mild emotional discomfort. You may choose to skip a question you do not want to answer. You may not personally benefit from taking part in this research but our study results may help in better understanding how high school AP teachers develop mental health literacy in a high achieving school setting.
- Please read this form and ask any questions you may have before you choose to participate in this research study.
- The approximate time commitment for study participation is 1 hour.

Why are we doing this study?

The purpose of this study is to investigate the perceptions of high school AP teachers in high achieving schools regarding mental health literacy.

Why are you being asked to be in this research study?

You are being asked to be in this study because you are a high school public education teacher, teaching at least one AP course in a high achieving school setting, are age 20 and older, and are employed full-time.

What will happen if I take part in this study?

If you choose to participate, you will complete a simple demographic questionnaire followed by a 1-on-1 interview about the study topic. The demographic questionnaire will ask you demographic questions (teaching experience, education level, age, race, gender, AP Department, number of AP courses you are currently teaching, and parental education level) and the 1-on-1 interview will ask you questions about your mental health knowledge base, how this construct develops, and how this construct relates to professional practice. I will audio record our interviews and take brief field notes to ensure I capture your words accurately. If at any time during our interviews you feel uncomfortable answering a question, please let me know, and you are free to skip the question. You also can choose to answer a question and elect to not have your answer recorded. I would simply turn off the recorder. If at any time you want to withdraw from the study, you can let me know, and I will erase the recordings of our conversations. Your total time commitment if you participate in this study will be approximately one (1 to 1.5) hour(s).

What benefits might I experience?

You will not benefit directly from being in this study beyond contributing to the field of research related to high school teacher mental health literacy development and relation to professional practice with adolescents.

What risks might I experience?

You may find some demographic or interview questions to be personal or sensitive, as they pertain to your understanding of mental health. For example, I'll ask you about your current mental health knowledge. These questions are personal and you might experience some mild emotional discomfort, although I do not anticipate this risk to be common. You may choose to skip a question you do not want to answer.

How will my information be protected?

You are asked to provide your personal e-mail address as part of this study. I will use your personal e-mail address to deliver to you the Informed Consent Form as well as to provide you with the interview transcript within weeks after the interview. To protect your identity and ensure confidentiality, I will assign a study ID code to your questionnaire responses. Once completed, I will delete the e-mail address from the questionnaire responses so the responses will only have the study ID code. I will use a digital audio recorder to record our interviews. Immediately following each interview, I will transfer the audio file from the digital recorder to university password-protected cloud data storage, and I will delete the audio file from the recorder. Upon conclusion of the research study, I will delete the audio files from the password-protected data storage. Each interview will be transcribed using word processing software. The transcriptions will be stored in password-protected data storage and will be deleted after the research study is completed. While the study is active, all data will be stored in a password-protected data base that can be accessed by the primary researcher. Only the researcher will have routine access to the study data. With approval from the Investigator, other individuals may need to view the information I collect about you including people who work for UNC Charlotte and other agencies as required by law or allowed by federal regulations. However, that information will be coded for anonymity.

How will my information be used after the study is over?

Following study completion, study data may be shared with other researchers for use in other studies. Your consent will not be asked for again if study data is needed as part of publishing our study results or used for other studies. The data we share will NOT include personally identifiable information.

Will I receive an incentive for taking part in this study?

You will not receive a financial incentive for taking part in this study.

What are my rights if I take part in this study?

It is your choice to participate in this research study, as participating is voluntary and choosing not to participate will not affect your employment or have any negative consequences. You have the right to cease participation at any time during the study. You also are not required to answer any questions you do not want to answer.

Who can answer my questions about this study and my rights as a participant?

For questions about this research, you may contact:

Emily K. Kraftson

ekraftso@uncc.edu or (704) 776-6631

Dr. Rebecca Shore

rshore6@uncc.edu or (704) 687-8867 ext. 4

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Office of Research Compliance at (704)687-1871 or uncc-irb@uncc.edu.

Consent to Participate

By signing this document, you are agreeing to participate in this study and that you understand what the study is about. You will receive a copy of this document for your records. If you have any questions about the study after you sign this document, you can contact the study team at the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study.

Name (PRINT)

Signature

Date

Name & Signature of person obtaining consent

Date

APPENDIX E: DEMOGRAPHIC SURVEY



This survey was designed to collect demographic information pertaining to current public high school AP teachers who are eligible and serve in a high achieving school setting. Data collected from this survey will be used for dissertation research purposes only.

- 1) How many years have you served as a high school public education teacher?
 - A. 1-3 years
 - B. 4-5 years
 - C. 6-10 years
 - D. 11-15 years
 - E. 16-20 years
 - F. 21-25 years
 - G. 26-30 year
 - H. Over 30 years

- 2) How many years have you served as a high school public education teacher in North Carolina?
 - A. 1-3 years
 - B. 4-5 years
 - C. 6-10 years
 - D. 11-15 years
 - E. 16-20 years
 - F. 21-25 years
 - G. 26-30 year
 - H. Over 30 years

- 3) How many years have you served as a high school AP public education teacher in North Carolina (teaching at least 1 AP course)?
 - A. 1-3 years
 - B. 4-5 years
 - C. 6-10 years
 - D. 11-15 years
 - E. 16-20 years
 - F. 21-25 years
 - G. 26-30 year
 - H. Over 30 years

- 4) How many years have you served as a public education teacher at your current school?
 - A. 1-3 years
 - B. 4-5 years

- C. 6-10 years
 - D. 11-15 years
 - E. 16-20 years
 - F. 21-25 years
 - G. 26-30 year
 - H. Over 30 years
- 5) How many years have you served as a public education teacher at a school similar to your current school in a “high achieving school” setting?
- A. 1-3 years
 - B. 4-5 years
 - C. 6-10 years
 - D. 11-15 years
 - E. 16-20 years
 - F. 21-25 years
 - G. 26-30 year
 - H. Over 30 years
- 6) Indicate your highest level of education achieved:
- A. Bachelor’s Degree
 - B. Graduate Teaching Certificate
 - C. Master’s Degree
 - D. Doctorate Degree
- 7) How many of your undergraduate teaching preparation program courses included topics related to mental health?
- A. 0
 - B. 1
 - C. 2
 - D. 3
 - E. 4 or more
- 8) How many of your graduate teaching preparation program courses, if applicable, included topics related to mental health?
- A. 0
 - B. 1
 - C. 2
 - D. 3
 - E. 4 or more
 - F. I did not participate in a graduate program
- 9) Indicate your age range:
- A. 20–24
 - B. 25–29
 - C. 30–34
 - D. 35–39

- E. 40–44
- F. 45–49
- G. 50–54
- H. 55–59
- I. 60–64
- J. 65+

10) What is your race?

- A. Caucasian
- B. African American
- C. Hispanic
- D. Asian American
- E. American Indian
- F. Other:
- G. Choose not to disclose

11) What gender do you identify with?

- A. Male
- B. Female
- C. Other:
- D. Choose not to disclose

12) What is your AP Department?

- A. English
- B. Math
- C. Social Studies
- D. Science
- E. Foreign Language
- F. Other:

13) How many total AP course sections are you currently teaching?

- A. 1
- B. 2
- C. 3
- D. 4
- E. Other:

14) Please indicate the highest level of education achieved by your parent(s) **or** legal guardian(s):

Mother

- A. HS Diploma
- B. Associates' Degree
- C. Bachelor's Degree
- D. Master's Degree
- E. Doctorate Degree

Father

- A. HS Diploma
- B. Associate's Degree
- C. Bachelor's Degree
- D. Master's Degree
- E. Doctorate Degree

Legal Guardian

- A. HS Diploma
- B. Associate's Degree
- C. Bachelor's Degree
- D. Master's Degree
- E. Doctorate Degree

APPENDIX F: FIELD NOTES



This study includes field note entries, which will be completed during each interview. This will be an opportunity for the principle investigator to record personal observations about the participants, their lives, and their perceptions, as well as the methodology and data collection process. Below are topics that will be addressed in each field note entry.

Participant Code:**Date:****Location of Interview:****Time of Interview:****Observational notes:**

Insert here a summary of anything the principle investigator will observe about the participant and the environment.

- **Description of the interview location**

- **Whether or not other people are present during the interview**

- **Observations about the participant**

Methodological notes:

Insert here comments on the process of the actual interview.

- **Comments about the informed consent**

- **Comments about the interview protocol and process**

APPENDIX G: REFLEXIVE JOURNAL ENTRIES



This study includes reflexive journal entries, which will be completed immediately following each interview. This will be an opportunity for the principle investigator to record personal observations about the participants, their lives, and their perceptions. Below are topics that will be addressed in each reflexive journal entry.

1. Summary of participant observations (body language, tone, demeanor, word use, etc.).

Insert text here.

2. Summary of methodology facilitation (interview process, including role of the researcher and relationship with the participant).

Insert text here.

3. Summary of potential researcher biases.

Insert text here.

4. Summary of evolving perceptions related to the study topic and research questions.

Insert text here.

APPENDIX H: MEMBER CHECKING PROTOCOL



This study has four research questions that are listed below. Each of these questions is accompanied by initial findings from the research process. At your convenience, please read through this document as well as your attached personal interview transcript that was transcribed verbatim by the principle investigator. You are welcome to reply directly to verify and confirm your responses and follow up with any details, if applicable. If you have any questions, concerns, or ideas that may assist with clarifying the research questions and the study as a whole, please let me know. While the member checking protocol step is optional, your feedback as a participant in this study is appreciated. Thank you!

RQ1. What is the perceived knowledge base of high school Advanced Placement teachers regarding mental health literacy?

Insert text here

RQ2. How do high school Advanced Placements teachers describe the development of their knowledge base regarding mental health literacy?

Insert text here

RQ3. How do high school Advanced Placement teachers perceive the effectiveness of training they have received about mental health literacy?

Insert text here

RQ4. How do high school Advanced Placement teachers perceive the relationship between their knowledge of mental health literacy and their professional practice?

Insert text here