Evaluating an Online Mental Health Literacy Curriculum for K-12 Staff

by

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The purpose of this study was to conduct a program evaluation of an online mental health literacy curriculum for K-12. In addition, the study established the next steps for professional development concerning mental health literacy for staff based on the findings. This study was guided by research questions: 1. How much knowledge has been gained after completing the modules and 2.Which areas of Mental Health Literacy need further professional development based on participant results?

Participants included 46, K-12 staff members from one elementary, one middle, and one high school in the Mid-Atlantic region of the United States. Over five months, educators completed the free course created through the University of British Columbia entitled, *Learn Mental Health,* and engaged in learning the content through text, videos, graphic organizers, and articles through the CANVAS platform. Quiz results were analyzed at a K-12 district level, by building. The study established that all participants scored a proficient score (80% or above) in the introductory content of mental health literacy and additional professional development will be focused on reducing stigma, concerning mental health among students and providing coping strategies surrounding stress and anxiety stress, and anxiety. No patterns in missed questions were detected, indicating that the questions created were of high quality and well developed. Program implementation was cost free and convenient for both the central office staff and participants taking the course. Several participants not only took the course but sought out the author to commend the course and referred

it to others. Findings from this study can be used as a basis for additional school systems to move forward in providing solid professional development in basic mental health literacy using the *Learn Mental Health* course for their staff.

Table of Contents

List of Tables

List of Figures

Preface

I am blessed.

When I think about the support I have been given throughout my career as both a student and educator, I am humbled by the amount of love and help I have felt not only when choosing to embark on this journey but throughout my life. This dissertation is a culminating experience in my educational career, so I am moved to thank many who have impacted me along the way. I especially want to recognize the educators who have been a part of this journey.

I was fortunate enough to know in second grade that I wanted to teach. Not everyone can say that they feel as strongly about their life goals as I did, but I knew my path. I had an amazing educator in my life who created joy for me in her classroom each day. I wanted to do that for others and to be that for others one day too. Thank you, Elizabeth Sharp. As I grew and realized how deeply personal relationships and connectedness mattered and benefited students, I was so grateful for teachers like Paula Paden, Claudia Filippi, Maryann Edwards, and Eileen Phelps. Teachers like these wonderful women were always so deeply involved with the community that no matter how much you "grew up" you were always part of their lives. The magic they created endured long past the time I spent in their classroom and generations of students have been fortunate to learn from and be loved by such wonderful people.

As I fell in love with music, my sight was set, and I had more teachers' guidance to support my love of learning, pushing me from a girl without formal lessons with a flute to the first chair of the wind ensemble in college. My gratitude goes to: David Hetrick, for your love of music and your passion for performing arts and reaching kids; Chad Mummert, for the extra time in the band room to get me to college and the job that changed my career; and Jack Stamp and Theresa Wacker

for showing me truly how to make beautiful music and share that passion and joy with others. I would not be here today without your passion, joy, and encouragement. Music always reminds me of why I began this journey in education. I loved connecting with people and watching students grow; music was how I loved connecting with all of you.

Never in my wildest dreams could I have imagined the opportunity to return to my school district to teach and make an impact, but when the job opened, I was blessed to be chosen. I was lucky enough to have my former teachers such as Ed Pechin and Craig MacKelvey become my close colleagues and push me into different educational opportunities. Thank you, guys, for urging me to continue with my education and for supporting me. I can't express the amazing and fulfilling feeling it has been to grow with my former teachers in education. Today, I am humbled and grateful to lead the teachers who taught me. I am also grateful for Libby Shindledecker and Ben Horn for being the examples that I aspire to be in leadership.

For the educators who participated in this study, thank you for the time and dedication to completing the modules and for believing in the value of the curriculum. I am grateful for the time that you spent reflecting on the course, sharing what you learned with your peers, and openly sharing the information you found helpful with others. Thanks to all of you, more people are being reached, trained, and educated, and the lives of students are being transformed in your classrooms.

For the members of my dissertation committee, an additional set of amazing educators, who have made it possible for me to complete this work and moved mountains for me on a personal level, thank you. To Dr. Mary Margaret Kerr for seeing my vision before I did and knowing the path I needed to take to make true impact, thank you. I have been blessed many times over with your guidance, mentoring, humor. I can't begin to describe the influence you have had on my life. Your leadership continues to amaze me and I am so grateful for your guidance and friendship. I

have also been so lucky to have connected with Dr. Maureen McClure, from our home ties, to our passion about student needs. Your perspectives and the roles you have served both at PITT and in your community will continue to influence my career. To Dr. Melissa Nelson: you are truly an inspirational leader, and although you might not realize it, our many conversations gave me the encouragement and hope that I needed throughout this process. I will forever be grateful for your mentorship and positivity.

To all of those who currently struggle with their mental health, especially our students, this work is for you. I hope it helps more of you get the support you deserve.

To my mother, my stronghold, my lifelong cheerleader, thank you. I am the woman I am today because of you. My gratitude, love, and appreciation for you only grows.

Finally, to Kenley, Mara, Alice and Tim, my beautiful family, who I am blessed to be loved and supported by, thank you. You are my greatest blessing of all.

1.0 Introduction to the Problem of Practice

Mental health concerns are contributing factors to the academic, behavioral, and emotional health of K-12 students in the United States. According to Cree et al. (2018) "1 in 6 children aged 2-8 years (17.4%) had a diagnosed mental, behavioral, or developmental disorder" (as cited by CDC, 2020). "Childhood mental, behavioral, and developmental disorders (MBDD) are associated with adverse outcomes that persist into adulthood" (Cree et al., 2018, p. 1377). The CDC defines mental disorders among children as "serious changes in the way children typically learn, behave or handle their emotions, which cause distress and problems getting through the day" ("Data and Statistics on Children's Mental Health," 2020). Some common mental health disorders diagnosed within children include but aren't limited to; anxiety disorder, depression disorder, oppositional defiant disorder, conduct disorder, attention-deficit/hyperactivity disorder, Tourette syndrome, obsessive-compulsive disorder, post-traumatic stress disorder, and more. Related conditions that impact a child's learning are also contributing factors to mental health concerns among children. The CDC ("Data and Statistics on Children's Mental Health," 2020) found the following:

> 9.4% of children aged 2-17 (approximately 6.1 million) have received an ADHD diagnosis, 7.4% of children aged 3-17 (approximately 4.5 million) have a diagnosed behavior problem, 7.1% of children aged 3-17 (approximately 4.5 million) have diagnosed anxiety, and 3.2% of children aged 3-17 years (approximately 1.9 million) have diagnosed depression.

Most students will experience a mental health disorder or challenges that last a brief period, but some will continue to face these challenges throughout their lives. What is unfortunate about these issues or concerns is that most people will not seek treatments for over 10 years after

diagnosis. For school-age children, the stigma attached to seeking treatment often prevents them from getting the help they need (Mental Health First Aid USA, 2016, p. 5-6).

One of the barriers to helping support students with mental health concerns is that most teachers and educational professionals do not feel they have the background knowledge needed or skills acquired to help students with issues that arise in the classroom. When an educator does not feel knowledgeable about mental health, their mental health literacy needs to be developed to be successful in supporting students in the classroom. According to Kutcher, Wei, and Coniglio (2016), mental health literacy:

> (MHL) has been defined as: understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and enhancing help-seeking efficacy (knowing when and where to seek help and developing competencies designed to improve one's mental health care and self-management capabilities) (p.155).

Although teachers recognize that many students present issues that are associated with mental health concerns, many have a difficult time distinguishing between "a mental health disorder, from a mental health problem, or even the experience of daily distress," (Kutcher, Wei, & Coniglio, 2016). Increasing teacher mental health literacy provides teachers with the ability to recognize concerns and start the process of helping students within the classroom.

According to Reinke et al., (2011) teachers play a key role in school-based mental health and are usually the ones who refer students. Teachers are the ones who have formed the deepest connection with students, spend the most one-on-one time with the children in their classrooms, and can recognize when emotional or behavioral changes take place within a child. Whitley, Smith, and Vaillancourt (2012) argued that "the role of schools, specifically teachers, in the prevention

identification, and intervention of mental health difficulties" (p. 58) is essential and that school personnel are often "the first to observe behaviors that indicate either the development or worsening of mental health problems" (p.59).

Reinke et al. (2011) found that over 75% of teachers reported mental health issues in students within the past year but only 34% felt prepared to support the students they referred. In a study conducted by the Canadian Teachers' Federation, Frose-Germain and Reil (2012) reported that when surveyed, 70% of 3,500 teachers indicated they never received training or professional development specifically related to mental health for students. Teachers with five years of experience or less were even less likely to have received training specifically addressing mental health (as cited by Carr, Wei, Kutcher, & Heffernan, 2018, p. 316). For schools to be more successful "personnel need to have the knowledge, skills, and attitudes required to recognize mental health difficulties and know the appropriate steps to take to both integrate the students effectively in classroom activities and to ensure that they receive the care they require," (Whitley, Smith, & Vaillancourt, 2012, p. 58). The days of hearing teachers say, "I cannot do one more thing, I just have too many things on my plate" must be replaced with a mindset that mental health is "on the plate."

1.1 Local Context

The setting for this problem of practice is a small, rural, mid-Atlantic district. Its elementary school includes grades kindergarten through four, middle school includes grades five through eight, and the high school includes grades nine through twelve for a current population of

1,800 students. Over the last three years, an increase in mental health concerns has become evident through teacher referrals and student self-referrals.

The district has experienced considerable population growth over the last three years, with a 12% increase the 2019-2020 school year. At the elementary school, enrollment increased from 530 students in kindergarten through fourth grade in 2017 to 717 students today. With this expansion, the elementary school has experienced more diversity than ever before. Today, the district is comprised of a larger group of families with lower socioeconomic status, blended and multi-family households, multi-generational households, as well as students who have experienced trauma.

One of the most noticeable population changes has been the increase in EL services throughout the district in the last three years. Our district has always outsourced EL services through the local IU and only needed a part time individual to fulfill the need of our student population K-12. With the increase in students speaking English as a secondary language at home in the last few years, our needs now require a fulltime and a part time EL position, moving towards a second fulltime position in the near future with many students speaking Telugu as their primary language.

An increase from 6% to 26% of the students on free and reduced lunches at the elementary school over the last three years signifies the changes in our student socio-economic population. For example, the Virtual Giving Tree, designed to help with food and gifts being purchased and distributed to families during the holidays, has increased from 15 student names referred to over 125 student names this past year.

The elementary school has also experienced a rise in student social-emotional needs, mental health concerns, and behavioral issues as documented by data from school referrals over

the past three years (2017-2020). Examples of mental health concerns include traumatic grief, self-harm, anxiety disorder, and depression disorder. Manifestations of these mental health concerns include the inability to focus, social isolation, emotional dysregulation, and negative social interactions. In filling out referral forms, teachers claim that they lack the skills or strategies to help students cope in the classroom. With the rise in student population occurring so quickly and with no way to predict the needs of new students, the elementary school staff struggles to provide the additional supports needed. Increasing the capacity for teacher mental health literacy to support students in their classroom with mental health concerns could be a starting point in better meeting the needs of our students.

1.2 Problem of Practice

The problem of practice is that children are having mental health concerns as documented by data reflected in our school referral form over the past three years. Examples of these concerns include traumatic grief, self-harm, anxiety disorder, and depression disorder. Manifestations of mental health concerns include inability to focus, social isolation, emotional outbursts, and negative social interactions. In filling out referral forms, teachers have expressed that they do not have the skills or strategies to help support students cope within the classroom.

2.0 Review of Supporting Scholarship

2.1 Mental Health Literacy Statistics and Definition

Mental health literacy stems from what the World Health Organization has defined as health literacy which includes "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways which promote and maintain, good health," (Kutcher et al., 2016, p. 154). When mental health literacy was first being conceptualized it was known to be "the knowledge and beliefs about mental disorders which aide their recognition, management or prevention" (Kutcher et al., 2016, p. 155) but today it has been defined as:

> Understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and enhancing help-seeking efficacy (knowing where and when to seek help and developing competencies designed to improve one's mental health care and self-management capabilities. (Kutcher et al., 2016, p. 155)

Jorm stated that mental health literacy includes seven attributes: "the ability to recognize specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes; knowledge of self-treatments; knowledge of professional help available; and attitudes that promote recognition and appropriate help seeking" (as cited by O'Connor & Casey, 2015, p. 511).

According to Bains and Diallo (2016) "mental health issues affect 20-25% of children and adolescents in the United States, and of these, only 36% receive mental health services" (p. 8). Stagman and Cooper found that children who come from low-income homes or are exposed to

childhood welfare and the criminal justice system at an early age are at an even higher risk for mental health problems (as cited by Bains & Diallo, 2016, p. 8). Unfortunately, for many children in these circumstances the ability to access proper care and support for mental health issues is also a challenge in getting the treatment needed.

When mental health concerns are left untreated, they can unfortunately "lead to a variety of negative outcomes including poor educational/vocational achievement, problematic interpersonal and family functioning, and reduced life expectancy" (Mcluckie et al., 2014, p. 379). Lack of support, counseling, and treatment can also lead to "chronic absence, low achievement, disruptive behavior and dropping out" of school completely (Anderson & Cardoza, 2016). Additionally, Waddell et al., (2015) state that "[w]ithout effective treatment, mental health problems that first present in childhood frequently lead to impairment and distress throughout adulthood, with a significant impact on both society and individuals" (as cited in Climie, 2015, p. 122).

2.2 Teacher's Role in Mental Health Literacy

The role of a teacher providing academic growth and knowledge to their students has grown and transformed over the years to not only provide knowledge and understanding for today's youth, but to also provide each student with whatever is needed to be successful in their future. This shift includes "helping students interact in socially skilled and respectful ways; practice positive, safe, and healthy behaviors; contribute enthusiastically and responsibly to their peer group, family, school, and community; and possess basic competencies, work habits, and

values" (Jennings & Greensburg, 2009, p. 491). Maintaining an "optimal classroom climate" where students feel safe and connected to their teacher is often cited as contributing to desired student outcomes and the ability to thrive. When taking into consideration that the majority of certified teacher's formal education is a four-year degree in learning pedagogy of instruction, the expectation of what their role and responsibilities cover has surpassed what they have been provided with for preparation.

On average "up to one in five kids living in the U.S. shows signs or symptoms of a mental health disorder in a given year" (Anderson & Cardoza, 2016), which means that in any given classroom of 25 students, five of those students are currently struggling with mental health issues. Ohrt et al., (2020) also noted that teachers are "in a unique position to identify and help support those who experience mental health concerns" (p. 834). However, when teachers have not received adequate training concerning mental health literacy, they are not able to successfully help identify those students struggling in their classroom.

2.3 Teacher Professional Development

According to Carr et al., (2018), "educators acknowledge with increasing frequency the important role teachers play in the classroom and beyond, especially concerning awareness and knowledge about mental health and mental disorders that they will face" (p. 315) but it is difficult to support students when they have not been prepared themselves. Providing teachers with professional development will assist them in supporting students in their classrooms who suffer from mental health concerns. They noted that this professional development was especially

important for middle and secondary schools for students between 12 and 25 years old where many mental concerns are diagnosed and for elementary students to develop "social emotional learning and positive mental health" (Carr et al., 2018, p. 315). In their study of 291 primary school teachers Gower et al., (2004) found that out of the teachers surveyed "[t]hey had received little in the way of training" when it came to the "identification, management and referral of children with mental health problems" (p.419). Out of those 291 teachers, 64 reported no training at all, 71 teachers indicated having received "very little" training throughout their careers, and four teachers indicated that their understanding of mental health was "adequate to fulfil their teaching role" (Gower et al., 2004, p. 421). It is unfortunate that teachers "typically rely on in-service professional development to enhance their knowledge of student mental health" (Ohrt et al., 2020, p. 834) once they have finally been employed, if they are lucky enough to have an employer provide mental health training or development.

In their review of teacher training K-12 regarding mental health professional development, Ohrt et al., (2020) found that teacher professional development was successful when the training was "(a) content-focused, (b) incorporates active listening, (c) collaboration, (d) utilizes models of effective practice, (f) includes coaching, (g) offers feedback, and (h) engaged in reflective practice" (p.834). If the professional development lacked any of these elements, they felt that teachers would not become more effective educators, or embed the knowledge gained through the training, since they were not engaged themselves. One suggestion offered was to provide teachers with web-based and online training since it could "be delivered more efficiently to a larger number of teachers" (p. 844), is cost effective, and can pinpoint content to focus on.

In a recent study conducted by Climie (2015), she noted the "significant reliance" on teachers or staff to have previously been trained to support students with mental health concerns.

She also acknowledged the reality of pre-service teacher training not integrating mental health training in their programs of study. To adequately provide teachers with the knowledge and skills needed to sufficiently help students with mental health concerns teachers should be trained on being able to:

> (a) identify children with possible mental health issues, (b) know what to do when they suspect emotional disabilities in these children (e.g., make appropriate referral to school counselors or psychologists), and (c) take action to support these students within the school environment" (p.123).

Climie (2015) continued to advocate that schools should not only have trained professional staff but should also have adequate resources to support students after diagnosis.

In addition to the professional development needed to help identify students with mental health concerns, Kutcher et al., (2016) found that increasing teacher knowledge of mental health literacy had a profound positive impact on identifying and seeking help for their students and themselves. After adapting a curriculum after *The Guide,* used in Canada, secondary school teachers in Tanzania were trained on using the *African Guide.* When reviewing their results of the paired t-test scores of pre- and post- knowledge, positive results included a decrease in mental health stigma, increase in curriculum specific knowledge, and increase in self-seeking help for "their students, friends, family members, and peers" (Kutcher et al., 2016, p. 1). In an additional study conducted by Viera et al., (2014) after providing 32 teachers with additional professional development, "a four-hour training program made up of two, two-hour sessions delivered in two consecutive weeks" (p. 3) the teachers could appropriately identify students who were the most symptomatic of mental health concerns. Their study continues to confirm that mental health

literacy training and professional development positively impact a teacher's ability to help support students with mental health concerns in the classroom.

2.4 School's Role in Mental Health Literacy

In recent years there has been more focus on recognizing the role schools play in providing support and education regarding mental health literacy to students, teachers, parents and the community. In the U.K., the Department of Education has released new policies to support increasing funding and curriculum. In the U.S., the Surgeon General's Report has "identified schools as important in early identification and treatment of mental disorders" (Mcluckie, 2014, p. 379), and the World Health Organization has continued to advocate for interventions and prevention of mental health concerns in schools.

One way schools support mental health literacy is by providing school-wide curriculum for *students*. Some schools choose to do this by focusing on specific mental health disorders, or by targeting mental literacy across all grade-levels. A recent study conducted by Mcluckie et al., (2014) found that after implementing *The Guide,* Canada's mental health literacy curriculum, to over 265 participants, their post-survey results had positive impact on student mental health literacy and attitudes. It was evident that the curriculum provided supported most students when reviewing their paired t-tests of pre-and post-survey knowledge and attitudes. Ojio. et al., (2015) found that "a concise, school-staff-led program may have significant effect on the improvement of MHL in secondary students" in a study they conducted with 118 ninth grade boys and girls. In this study, the curriculum included two 50-minute sessions of direction instruction with evaluations taken before instruction, directly after, and finally three months after to assess the impact. They

found that just those two sessions had significant impact on help-seeking behaviors and knowledge of mental illness in their group both immediately after and three months after the curriculum was delivered. However, to successfully implement a school-wide mental health literacy curriculum or program, *staff* must first receive mental health training or curriculum development to deliver the content with integrity and genuine support for the students' understanding of mental health concerns.

2.5 School-Based Mental Health

Schools often serve as a center of the community providing resources and making appropriate connections for families to receive support and services needed to thrive. Regarding mental health, "schools have been historically the largest providers" (Baines & Diallo, 2015, p. 8) and "[s]chool nurses are often the first health care professional to come in contact with children and adolescents experiencing mental health issues" (Bains & Diallo, 2015, p. 9) and often serve as the connection between the school and additional outside services available. Many schools are fortunate to have School Based Mental Health providers who are on campus that can provide physical, mental, and emotional health care services while they are in school. Additional services provided can also include counseling, intervention, "case management, classroom behavior and learning support, substance abuse" and more (Baines & Diallo, 2015, p. 9). Climie (2015) felt that "providing comprehensive support of the child in his or her school environment" (p.123) was the most effective way to get students the support needed concerning mental health. Having school-

based mental health providers on campus gives students the opportunity and access they wouldn't otherwise have if relying on parents or other family to seek out help.

2.6 Trauma-Sensitive Schools

One school solution to some kinds of mental health concerns has been to adopt a trauma sensitive approach in schools. This approach is a "whole-school approach utilizing the response to intervention multi-tiered framework" (Dorado et al., 2016, p. 163). The three-tier design consists of tier one, where all learning environments and school personnel are trained to be supportive and trauma informed, tier two, where supports are in place for at risk students, and tier three, which consists of intense interventions. One goal of this approach is to stop the "school to prison pipeline" by transforming traditional discipline actions and considering the impact of inequity, bias, chronic stress, and trauma in student lives (p. 164). When making a concerted effort to change the culture of a school building to be trauma sensitive, the attitudes towards problematic behavior should shift from asking "what's wrong" with a student, to "what happened" to a student. Looking through this lens of trauma sensitivity helps students with some types of mental health concerns and backgrounds that include trauma from being disciplined without considering or acknowledging their history or background.

A trauma sensitive school is defined as "one in which all students feel safe, welcomed and supported, and where addressing trauma's impact on learning on a school-wide basis is at the center of its educational mission" (Cole et al., 2019). For schools to become trauma sensitive all educators must be trained to promote trauma sensitive culture and techniques. In the study conducted by Cole et al., (2019) four elementary schools and one middle-high school took over

two school years to train their staff and implement a trauma sensitive approach. The results showed that the planning and implementation was successful for their trauma sensitive school based on the adequate training and comfort of the teachers who bought into the professional development and implemented it with integrity.

2.7 Stigma and Funding

Unfortunately, one of the most challenging aspects of getting students the mental health services they need is to overcome the stigma associated with being diagnosed with a mental health disorder or seeking help for a mental health concern. In many cultures, religions, communities, and families, poor mental health is not regarded as an illness or something that someone should seek treatment for. In some instances, the impact of how people will be perceived sometimes completely shuts off available resources to students to maintain status within the circle of that family. Stigma is one of the reasons why "the majority of youth with mental disorders" do not seek treatment or go untreated (Kutcher et al., 2016, p. 2). Additionally, since the 2007 recession, "many schools have been faced with significant budget cuts, which have affected mental health programs" and supports which have impacted providing students with what they need since historically schools "have been the largest providers of mental health care" (Bains & Diallo, 2016, p. 8).

2.8 Teacher Emotional Exhaustion

Teacher turnover has been a growing problem over the last decade. On average only one of three teachers will remain in the profession after the first five years of teaching costing "the United States up to 7 billion" (Curry & O'Brien, 2012, p, 179) dollars per year. Often reported by the news and acknowledged through the media is the fact that many young professionals have found it difficult to continue with the traditional salary, benefits, and wages provided, making the teaching profession less desirable to enter and continue for the duration of a thirty-year career. What is less often acknowledged is the emotional toll that the increase of responsibilities has taken on the profession. According to Jennings and Greensburg (2019) "[e]motionally exhausted teachers are at risk of becoming cynical and callous and may eventually feel they have little to offer or gain from continuing, and so drop out of the teaching workforce" (p. 492). When a teacher is feeling this emotional exhaustion, often referred to as burnout, it makes it difficult to provide the optimal learning environment for students. According to Jennings and Greensburg (2019) with the climate of the classroom is so closely connected to student achievement and performance when students experience a teacher's feelings of frustration due to "lack of resources to effectively manage the social and emotional challenges" (p.492) the classroom environment deteriorates and student growth and achievement decline.

Curry and O'Brien (2012) acknowledge that teachers are continuing to carry heavier workloads with fewer resources to be successful. Some responsibilities they cite as contributing to "teacher stress, burnout, instruction fatigue, and attrition" include "difficult student behavior including misconduct, violence, and lack of student motivation; lack of planning time; an increased emphasis on accountability measures to support effectiveness" and more (p. 178). In their research the "misalignment" of teacher daily work with the interests of why they entered the profession in

the first place has been a contributing factor to job dissatisfaction. Unfortunately, this job dissatisfaction has been linked to increased stress of the educator, increased student discipline in the classroom, and overall lower student achievement.

2.9 Access

When diagnosing students in early childhood "defined as the period up to age 6 years" with mental health concerns, there is always a debate if what is being observed is developmental or symptomatic of a mental health disorder (Klitzing et al, 2015, p. 375). According to Klitzing et al, (2015) "17% of all children suffer from a mental disorder in early childhood, however, of those 17% of children "only 11% of affected children were referred to a specialist" (p.375). There is uncertainty for caregivers who have not had mental health training to know if observable behaviors are indicators of concern or are fleeting and part of a child's developmental growth. Early access to health care plays an integral role to young children to be seen by trained medical professionals.

Some of the most common disorders observed in early childhood include reactive attachment disorder, feeding disorders, motor regulation/hyperactivity, anxiety, and depression (Klitzing et al, 2015, p. 377-381). Without access to early health care, many of the children who experience these early indicators of mental health concerns will not be evaluated or diagnosed until they are school aged, and their kindergarten teacher identifies the concern and begins the process for support and services.

When teachers identify needs of students and bring those needs to Student Assistance Programs or Student Support Teams, it is emotionally exhausting to continually experience a lack of resources to help students identified. In the district being studied there are a couple of different

access points for resources available. Teachers function primarily as the first line of defense when it comes to knowing when a student has a need. Guidance counselors (one in the elementary, one in the middle, and two in the high schools) are on the second tier of support available to students to provide further de-escalation, counseling, support groups, safe places, lessons in peer interaction, academic support, and more. When a student is in need of deeper support, from a clinical stand point, and need access to a therapist, or help seeking support through medication, or additional avenues, we have outsourced certified counselors that come to the schools to meet with students. These counselors work with the parents' insurance and schedules to make accommodations to make therapy more accessible for clients and the school makes spaces and time for this service to be provided to help support students. The issue that every system is currently running into is that we have not be able to refer a student to one of these outside organizations since their schedules have been completely full for months, based on the demand.

Unfortunately, "in some schools, counselors focus solely on academics" (Anderson & Cardoza, 2016) and have less of a role in counseling due to the increase of student and teacher accountability with standardized testing, graduation, and report card grades. In a survey conducted by Brown et al., (2006) "75% of the sample of participants defined the school counseling role as a combination of both mental health and academic counseling" (p. 334). Even when a counselor is available, many are functioning with caseloads of over 500 students at a time when "The American School Counselor Association recommends a caseload nearly half that size" (Anderson & Cardoza, 2016). Most teachers recognize that when a student suffers from a mental health concern their ability to do the work required academically is impaired, but when they seek out the help needed and the lack of available resources prevents a student from thriving, it is exhausting and defeating.

More professional development for staff to provide support and intervene would continue to help with the lack of resources, although not completely solve the growing problem.

School psychologists also play a role in identifying students with mental health concerns, often conducting tests, doing observations, running support teams, working with parents, and referring families to available resources. However, many are also functioning with oversized caseloads and responsibilities. The role of the school psychologist is also grounded in navigating the education path for students and is not focused on the clinical work often needed for students with mental health concerns. According to Anderson and Cardoza (2016), "[i]n the U.S., there is just one school psychologist for every 1,400 students, according to the most recent data available from the National Association of School Psychologists." Our district currently functions with one school psychologist to serve over 1,800 students, which has made it difficult to work with students at all. Our teachers often feel personally defeated when they have sought help for a student struggling to only be met with waiting for months for that student to be seen.

Finally, the school nurse also plays a critical role in identifying students with mental health concerns, working closely with the school guidance counselor, behavioral specialist, and principals in regards to student health concerns and needs. It is often the school nurse who forms the closest relationship with a student for a variety of reasons. Our school nurse not only serves as the individual that provides students with their basic medical needs, but also counsels students, allows students to use the office as a "safe place" to cool down or regroup from difficult situations or transitions, and more. In this role, the nurse is able to identify mental health concerns and address them with other school employees to help students get access to the resources available.

2.10 Teacher Attitudes

Another challenge that presents itself when providing students with mental health concerns is the attitude a teacher has developed concerning mental health support. Due to the lack of professional development and training, many teachers do not feel prepared to engage in conversations with students regarding mental health issues. Some report not feeling comfortable even addressing why a student is upset in class, in fear of doing something "wrong" or taking time away from the other students in class who expect to receive instruction. Many teachers also feel as though mental health should only be addressed by "mental health professionals from outside schools, not by school staff" (Ojio et al., 2015, p. 573) or at the very least solely with the guidance counselor. According to Cole et al., (2019) teachers must be encouraged by school leaders to focus on supporting students with mental health concerns. This shift in attitude is a process that must be modeled from the top-down and one that creates a "sense of urgency; identifies staff priorities for change; select action steps to address staff priorities; and evaluate outcomes and assessing progress" (p. 2).

2.11 Conclusion

Supporting students and helping them learn and grow is one of the core reasons that inspires most pre-service teachers to choose education as a profession. The days of learning more about one's subject area, how to write curriculum, administer assessments, and manage behavior are now no longer enough to ensure the success of every student in the classroom. With mental health concerns on the rise for adolescents and educators being on the front lines of early identification,

prevention, and support, teachers must receive professional development to adequately support students in their classrooms with mental health issues. Although mental health literacy is not currently a part of pre-service teacher education, it must be incorporated in professional development or trainings for teachers to be successful identifying students with concerns, de-escalating students, and getting them the support and services, they need to thrive. Supporting mental health literacy for educators will not only benefit the students but also benefit staff recognizing mental health concerns within themselves and those around them. When staff feel confident in their knowledge and ability to support students with mental health concerns, it will raise their self-efficacy to make a difference in the lives of those they teach and decrease the growing problem of teacher "burn-out" and exhaustion in the profession. As we work towards mental health literacy becoming an essential part of pre-service training for teachers, providing a strong foundation while working in the profession through professional development or training will continue to benefit students academically, emotionally, and behaviorally, and staff as professionals who continue to go above and beyond to ensure each student is successful in their classroom.

3.0 Methods (Applied Inquiry Plan)

3.1 Theory of Improvement

Children are having mental health concerns as documented by data reflected in our school referral form over the past three years and teachers in the classroom have indicated that they do not feel confident or have the skills to support their students. Examples of these concerns include grief, self-harm, anxiety, and depression. Manifestations of these mental health concerns include the inability to focus, social isolation, emotional outbursts, and negative social interactions. My theory of improvement is designed to give teachers more confidence in recognizing and supporting their students in the classroom and provide additional strategies and tips they can implement in their instruction through completing the *Learn Mental Health Literacy* Curriculum.

3.2 Driver Diagram

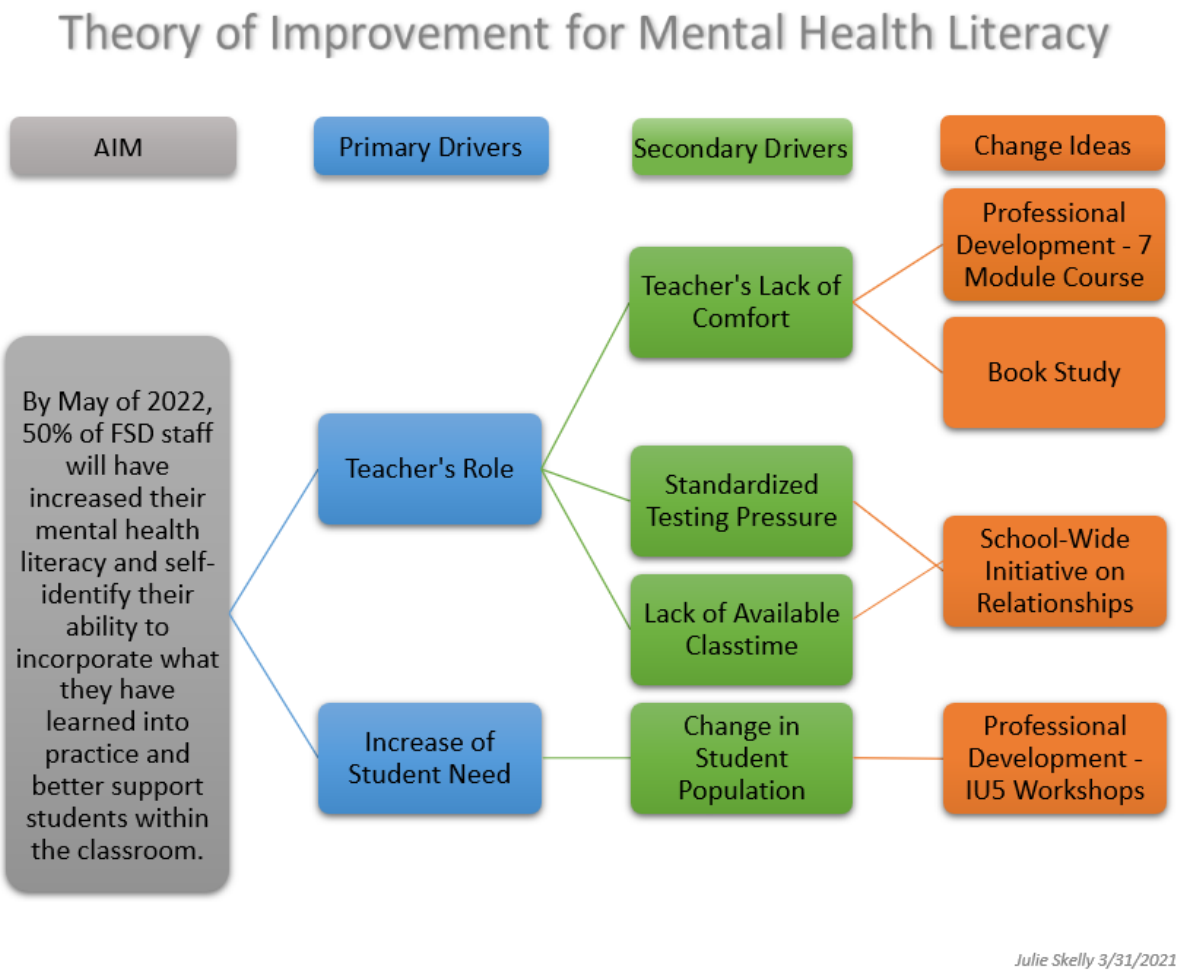


Figure 1 Driver Diagram

The following questions were used to guide this program evaluation:

1. How much knowledge has been gained after completing the modules?
2. Which areas of Mental Health Literacy need further professional development based on participant results?

3.4 Intervention

For the purpose of this program evaluation, I used the *Learn Mental Health Literacy* professional development offered by the University of British Columbia. This professional development was specifically created to help teachers increase their mental literacy through a seven-module course that includes the following areas: *Introduction & Background, Stigma & Mental Illness, Human Brain Development, Understanding Mental Health, Mental Illness & Related Issues in Young People, What is Treatment for a Mental Disorder and How Do We Know What is Likely to Work, Seeking Help & Providing Support,* and *Caring for Students and Ourselves*. All professional staff were offered this eight to ten-hour training in the fall of 2021-2022 school year. If staff choose to participate, they had the opportunity to earn both Act 48 credit and use this professional development as their Differentiated Supervision. Quiz scores at the end of each module were used to gauge participants' knowledge of mental health literacy.

The *Learn Mental Health Literacy* professional development was chosen first because of its success in promoting teacher mental health literacy (Kutcher et al., 2019). Second, the course was free to all users who choose to create a log in. This option was great for school districts to get access to quality professional development without the setback of cost. Third, since this mental health literacy course was web-based, staff could work at their own pace, save their work, and continue to work from at home or in-school. With the past challenges of the COVID-19 pandemic, accessibility to professional development was important for the fall of the 2021-2022 school year. Regardless of the mode of instruction school was conducted in (remote, in-person, or hybrid formats) teachers would continue to have the ability to access this professional development.

The implementation of this course was a part of a larger focus on mental health throughout the district and began in the fall of 2021. Teachers were required to complete the professional

development beginning at the start of the school year and to finish the modules by February 1, 2022.

3.5 Timeline

To begin this study an introductory email was sent to all staff describing the training and program evaluation involved from Dr. Justin Zona, our curriculum director (see Appendix A). Included in the introductory email a detailed set of instruction was included (see Appendix B) for registering for the course and how to turn in quiz results from each module. Finally, after February 1, 2022, a follow-up email (see Appendix C) was sent asking participants to send a PDF of their quiz results including each question and response. Finally, the researcher requested the PDF quiz result documents from the school district's central administration office to analyze.

Table 1 Timeline

Time Frame	Activity
Fall of 2021	• Introduce the *Learn Mental Health* curriculum to all school staff • Introduce the program evaluation I am conducting for my dissertation
Fall of 2021	• Have teachers begin the modules
Spring 2022	• Have staff complete all seven modules and the quizzes • Collect data from school district business office • Compile and analyze data

3.6 Setting and Participants

This program evaluation was conducted in a mid-Atlantic public school district with members of the school faculty. All professional employees in the school district (teachers, counselors, para educators, school nurses, and administrators), approximately 130 participants total, were offered the professional development for this intervention. Administrative assistants, clerical professionals (secretaries) and custodians were not be included in this study. Participation in this professional development also provided staff with Act 48 hours and a means to complete the Differentiated Supervision for the 2021-2022 school year.

3.7 Data Analysis

(Modules are permitted to be taken more than once)

Data analysis followed these steps:

1. Each participant's scores were entered anonymously into a spreadsheet.
2. Across the entire group of participants, the minimum, maximum, range, average score and standard deviation for each quiz were calculated. This gave an indication of the difficulty level for each module.
3. Across each school, the minimum, maximum, range, average score and standard deviation for each quiz were calculated.

4. Across each role group listed below, the minimum, maximum, range, average score and standard deviation for each quiz were calculated. However, after determining there were not enough participants in all role groups, this data was discarded to maintain anonymity for all participants.
    a. Teachers
    b. School Counselors
    c. Nurses
5. The initial scores, attempts taken at quizzes, final scores, and questions missed were analyzed for the entire group, and each school (high school, middle school, elementary school).
6. For each of these groups it was determined if completing the course resulted in scores of 80% or above, which the authors of the course considered the standard for introductory mental health literacy attainment.

3.8 Safeguards

The University of Pittsburgh Human Research Protection Board (IRB) reviewed this study and deemed that it qualified as a program evaluation and therefore is not considered research under the regulations.

4.0 Findings

This chapter organizes the findings of the professional development results into four separate sections:1. the initial scores, 2. the number of attempts taken at quizzes, 3.the final scores, and 4. the questions that were missed on the final quizzes of participants. Each section was sorted by the district K-12 level, by school building, and anecdotal notes that participants provided concerning their professional development in that area. Originally, data was sorted by role group but after determining there were too few participants in each role, that data was discarded to maintain the anonymity of all participants. Data for each section was analyzed providing the minimum score, maximum score, range, mean, and standard deviation.

For the 2021-2022 school year 71 staff members were offered the opportunity to choose which professional development they would complete for the year. Forty-six staff members, or 65%, chose to take the *Learn Mental Health* modules, twenty-three of those participants finished their course work and submitted their quizzes a month in advance of when it was due.

4.1 Initial Scores

The first section of data in this study contains the initial scores of all forty-six participants in this study as shown in Table 2. Although not required, many chose to take additional attempts at quizzes to score better, and those scores are reported later as their final scores in this study. The initial scores were reported out on each of the PDFs turned in by the participants regardless of their final scores. After examining the final scores, it was evident that the initial scores would show

more insight to which modules proved to be the most difficult for participants. Initial scores are examined by District K-12, and School Building.

4.1.1 District K-12

The initial scores of the whole group of 46 participants District K-12, showed an average of 9.35/10 overall or 93.5% indicating that their initial knowledge gained from taking the modules was proficient (8/10 or 80% or higher). Their initial scores also indicated that the two modules that proved to be the most difficult for participants were modules two and seven, where module two's average score was 8.7 /10 and module seven's was 8.76/10. Throughout the study, module two, Stigma & Mental Health, and seven, Caring for Students & Ourselves, frequently appeared to be the most difficult across buildings, and role groups. The standard deviation is another set of data that shows when the range of the group is lower, the standard deviation is smaller indicating that the majority of participants scored closer to the mean score. When the standard deviation is higher, it indicates that the range of the scores are spread larger and not as close to the mean score of participants.

Table 2 Initial Scores District K-12

LMH Initial Scores District K-12								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	7	6	7	7	8	7	6	5
Maximum Score	10	10	10	10	10	10	10	10
Range	3	4	3	3	2	3	4	5
Mean	9.65	8.7	9.59	9.54	9.76	9.33	9.43	8.76
Standard Deviation	0.64	1.35	0.75	0.75	0.57	0.99	0.91	1.49

Overall Score	9.35/ 93.5%

4.1.2 School Building

After scores were examined on a District K-12 level, they were broken down by building level to analyze similarities or differences. The district in this study only had one building per level with 14 participants from the High School, 5 participants from the Middle School, and 27 participants from the Elementary School in this study.

The initial scores for the High School participants reflected similar scores to the District K-12 overall scores with 14 of the 46 participants. The average score for all participants in this building was 9.23/10 or 92%, proficient. The two modules that proved to be the most difficult for participants were again, module two, Stigma & Mental Health, and module seven, Caring for Students & Ourselves, containing the lowest scores for the average of participants. Similarly, these modules also had the highest standard deviations with participants scoring further away from the mean score of the overall group.

Table 3 Initial Scores Building High School

LMH Initial Scores School Building - HS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	7	6	7	7	8	7	6	5
Maximum Score	10	10	10	10	10	10	10	10
Range	3	4	3	3	2	3	4	5
Mean	9.5	8.64	9.36	9.57	9.64	9.36	9.43	8.36
Standard Deviation	0.85	1.34	0.93	0.85	0.63	1.01	1.16	1.65

Overall Score	9.23/ 92.3%

The initial scores for the Middle School participants reflected different scores to the District K-12 overall scores with 5 of the 46 participants. The average score for all participants in this module was 9.4/10 or 94%, proficient. The two modules that proved to be the most difficult for participants were, module five, What is Treatment?, and module seven, Caring for Students & Ourselves, containing the lowest scores for the average of participants.

Table 4 Initial Scores Building Middle School

LMH Initial Scores School Building - MS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	9	8	9	9	8	8	9	8
Maximum Score	10	10	10	10	10	10	10	10
Range	1	2	1	1	2	2	1	2
Mean	9.4	9.4	9.8	9.6	9.6	9	9.6	8.8
Standard Deviation	0.55	0.89	0.45	0.55	0.89	0.71	0.55	0.84
Overall Score	9.4/ 94%							

The initial scores for the Elementary School participants reflected similar scores to the District K-12 overall scores with 27 of the 46 participants. The average score for all participants in this module was 9.39/10 or 93.9%, proficient. The two modules that proved to be the most difficult for participants were again, module two, Stigma & Mental Health, and module seven, Caring for Students & Ourselves, containing the lowest scores for the average of participants. Similarly, these modules also had the highest standard deviations with participants scoring further away from the mean score of the overall group.

Table 5 Initial Scores Building Elementary School

LMH Initial Scores School Building - ES								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	8	6	8	7	8	7	8	5
Maximum Score	10	10	10	10	10	10	10	10
Range	2	4	2	3	2	3	2	5
Mean	9.78	8.59	9.67	9.52	9.85	9.37	9.41	8.96
Standard Deviation	0.51	1.42	0.68	0.75	0.46	1.04	0.84	1.51
Overall Score	9.39/ 93.9%							

4.1.3 Anecdotes

In addition to their scores some of the participants offered initial reactions to taking the course; some examples follow:

“This course was very easy to navigate! I liked the videos, real-world, examples, and charts to make the lessons engaging. With no experience using this website before, it was very easy to get a hold of within the first module. Thank you for giving us this opportunity to add very valuable information to our "teacher toolbox"”

“I think it’s a great beginner course and would 10/10 recommend it.”

“This was a wonderful and valuable course. Unfortunately with the pandemic, we have seen more students in the class struggle with mental health issues. Learning how to use appropriate language and helping students realize that there are not the only ones that they may be dealing with

mental health issues and that there are professionals that can help may give them some hope. I wish to see more students reaching out for appropriate mental health support and as teachers to become more capable to support them and help them build resilience and find ways to become more successful in life."

"Are we going to require everyone to take this? I think we really should. I think everyone could benefit from this."

"I'm only through the first two modules and I already know that I'm getting more out of this than most PD I've had in a long time."

"Selfishly, for life, not even just for the classroom, this was really helpful information."

"I wish now that I wouldn't have required the other PD, this is much more valuable right now."

4.1.4 Summary

The initial scores of the *Learn Mental Health* modules, proved beneficial to analyze since they provided more insight to the initial struggles of the participant when it came to comprehending the material presented. Even though all 46 of the participants scored an average over 8/10 on the initial score indicating proficient knowledge acquired, it was easier to see where they struggled as a group, in different buildings, and throughout their different roles. Most participants scored the lowest in modules two, Stigma & Mental Health, and seven, Caring for Students & Ourselves, indicating that more professional development could be geared towards stigma and mental illness, and caring for ourselves and students specifically addressing stress and anxiety. When evaluating the scores of the high school and elementary school, these buildings mirrored the district as a

whole. The middle school also struggled with module seven, but struggled with the content in module five, What is Treatment?, regarding treatment for a mental disorder.

4.2 Attempts

After each of the seven modules in the *Learn Mental Health* course the participant was asked to take a 10 point quiz, with the exception of two quizzes in module four. Each quiz gave the participant multiple attempts to take it to improve their score. When turning in the PDF of their scores, all of the participant's quiz scores were included, the number of attempts taken for each quiz, and the final score recorded (the highest score). For this study, participants were not given parameters for how many attempts they could or should take on a quiz or what score they should achieve, they were simply asked to take the quiz and if they wanted to attempt it again, they were permitted. What proved to be interesting to the researcher was how many participants pushed themselves to score a minimum of 8/10 to 10/10 on the quizzes without being asked. Additionally interesting was to see how many participants volunteered to take the quiz again multiple times, sometimes in excess of four or five times, on a single 10 point quiz. The results of this data are separated again by District K-12 and School Building to see how many attempts were taken for each module located in the Appendix in Table 10. through Table 13.

4.2.1 Anecdotes

In addition to their scores some of the participants offered reactions to taking the quizzes more than once., Some examples follow:

"I didn't even realize I wasn't using the right language. That was an eye-opener."

"After putting all of that time in, I just didn't want to get it wrong."

"I thought it was great! There was a lot I wasn't aware of. Some of it I had to go over more than once."

4.2.2 Summary

The number of attempts the participants took the quizzes was not an anticipated data point that would be of interest to the researcher prior to conducting this study. Only after collecting the PDFs and analyzing the quiz results would it become of interest how many participants would, on their own, choose to push themselves to strive for better scores by attempting quizzes more than once, or multiple times. It was encouraging to hear how many participants didn't settle for lower scores because they didn't want to be misinformed or to misunderstand the information they read in the module.

4.3 Final Scores

The next set of data collected and analyzed in this study consisted of the final scores of each of the forty-six participants. Tables 6-9. outlines final scores attained by District K-12, and

School Building. The final scores were reported out on each of the PDFs turned in by the participants. After examining the final scores, it was evident that many participants improved scores from their initial quiz to the final quiz with higher overall scores in all categories below.

The final scores of the whole group of 46 participants District K-12, showed an average of 9.81/10 overall or 98.1% indicating that their final knowledge gained from taking the modules was proficient (8/10 or 80% or higher). Their final scores also indicated that the two modules that proved to be the most difficult for participants were modules two, Stigma & Mental Health and seven, Caring for Students & Ourselves, where module two's average score was 9.72 /10 and module seven's was 9.76/10. Throughout the study, module two and seven frequently appeared to be the most difficult across buildings. This data was similar to the initial scores for the District K-12 group as well and proved to be a consistent theme throughout the initial and final scores of the participants.

Table 6 Final Scores District K-12

LMH Final Scores District K-12								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	9	7	8	9	9	8	8	8
Maximum Score	10	10	10	10	10	10	10	10
Range	1	3	2	1	1	2	2	2
Average Score	9.87	9.72	9.8	9.83	9.91	9.8	9.78	9.76
Standard Deviation	0.34	0.62	0.45	0.38	0.28	0.45	0.47	0.52
Overall Score	9.81/ 98.1%							

4.3.1 School Building Breakdown

After scores were examined on a District K-12 level, they were broken down by building level to analyze similarities or differences. The district in this study only had one building per level with 14 participants from the High School, 5 participants from the Middle School, and 27 participants from the Elementary School in this study.

The final scores for the High School participants reflected similar scores to the District K-12 overall scores with 14 of the 46 participants. The average score for all participants in the High School was 9.83/10 or 98%, proficient. The module that proved to be the most difficult for participants was, module three, Human Brian Development, containing the lowest score for the average of participants. Similarly, this module also had the highest standard deviation with participants scoring further away from the mean score of the overall group.

Table 7 Final Scores School Building High School

LMH Final Scores School Building - HS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	9	9	8	9	9	9	9	9
Maximum Score	10	10	10	10	10	10	10	10
Range	1	1	2	1	1	1	1	1
Mean	9.79	9.86	9.64	9.93	9.86	9.79	9.93	9.86
Standard Deviation	0.43	0.36	0.63	0.27	0.36	0.43	0.27	0.36
Overall Score	9.83/ 98.3%							

The final scores for the Middle School participants reflected some different scores to the District K-12 overall scores with 5 of the 46 participants. The average score for all participants in this module was 9.68/10 or 97%, proficient. The two modules that proved to be the most difficult for participants were, module five, What is Treatment?, and module seven, Caring for Students & Ourselves, containing the lowest scores for the average of participants. Even though these scores were different compared to the District K-12 overall final scores, they were in fact the exact same results as the Middle Score participants initial scores showing difficulties in the same areas.

Table 8 Final Scores School Building Middle School

LMH Final Scores School Building - MS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	9	9	10	9	10	8	9	8
Maximum Score	10	10	10	10	10	10	10	10
Range	1	1	0	1	0	2	1	2
Mean	9.6	9.8	10	9.8	10	9.2	9.6	9.4
Standard Deviation	0.55	0.45	0	0.45	0	0.84	0.55	0.89
Overall Score	9.68/ 96.8%							

The final scores for the Elementary School participants reflected similar scores to the District K-12 overall scores with 27 of the 46 participants. The average score for all participants in this module was 9.83/10 or 98.3%, proficient. The two modules that proved to be the most difficult for participants were, module two, Stigma & Mental Health, and module six, Seeking Help & Providing Support, containing the lowest scores for the average of participants. This slightly differed from the District K-12 overall final scores with module six having content relating

to Seeking Help & Providing Support not presenting itself as an area of difficulty previously. Similarly, these modules also had the highest standard deviations with participants scoring further away from the mean score of the overall group.

Table 9 Final Scores School Building Elementary School

LMH Final Scores School Building - ES								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Score	9	7	9	9	9	9	8	8
Maximum Score	10	10	10	10	10	10	10	10
Range	1	3	1	1	1	1	2	2
Mean	9.96	9.63	9.85	9.78	9.93	9.93	9.74	9.78
Standard Deviation	0.19	0.74	0.36	0.42	0.27	0.27	0.53	0.51
Overall Score	9.83/ 98.3%							

4.3.2 Anecdotes

In addition to their final scores some of the participants offered reactions to completing the course, some examples follow:

"May I send this information out to the family? I think there is a lot concerning mental health that is better explained here than I could ever do myself."

"It's important to talk about behaviors in the classroom, but the root of the issue is usually trauma or the reason why they act out is in there, and we need to work on that."

"I'm just seeing so many more kids that are willing to talk about their mental health, this gave me better language and strategies to approach these conversations."

"We actually worked through a lot of this as a team, and it was great to discuss some of these issues as they keep coming up in our rooms, especially this year, it was a really great training for all of us."

"I especially liked how everything was brought back to the research."

"The one thing I really loved was the TED Talk on Stress. Especially about allowing kids to have stress to build resilience. It was important to hear to not make life stress-free because kids won't build the resilience they need to thrive."

"I really enjoyed this and I am happy I had the opportunity to learn a bit more about mental health and how it pertains to our students."

4.3.3 Summary

The final scores in this study were exceptionally high with an overall average of 9.8/10 on all quizzes out of the 46 participants. Similar to the initial scores, the final overall scores echoed the same results that the participants struggled the most answering the questions in module two, Stigma & Mental Health, and module seven, Caring for Students & Ourselves. With an overall average score of 9.8 or 98% proficient, the researcher is confident that the participants have successfully obtained an introductory level of understanding of mental health from this professional development course.

4.4 Final Questions Missed

Final questions missed in the *Learn Mental Health* course were tracked from all 46 participants and analyzed. No patterns emerged in questions missed when looking at the District K-12 or School Building Groups. Tables 14.-17. in Appendix F outline the number of participants that missed each question on each quiz throughout the course. The most questions missed throughout the District K-12 were in module two, Stigma & Mental Health, with a total of 12 questions followed up by module seven, Caring for Students & Ourselves, with a total of 10 questions missed. When the district looks at providing professional development in the future, it is evident that the focus should be on Stigma & Mental Health and or on Caring for Students & Ourselves based on the results of this study.

5.0 Discussion

After reviewing the *Learn Mental Health* quiz results and anecdotal feedback, we can conclude that this was a successful professional development. The course was easy to adopt and push out to staff, administration, school board, and community members. It was well received by those who took it. The completion of the course was met with enthusiasm: with more than half of the participants completing early, and with more staff members requesting the opportunity to take the modules.

One might wonder why educators were so enthusiastic about taking this course. Was it their relationship to the program evaluator? In fact, the majority of the participants do not work directly with this researcher and have not ever met. Many of the anecdotal notes suggested that the main motivator was because of the state of the students in their classroom during the COVID-19 pandemic.

Professionals could also question if educators were enthusiastic about taking the course because it was assumed to be a short investment of their time. Subsequently, many of our educators took the course, and followed up by taking their quizzes multiple times to ensure they scored higher even though it was not a requirement. Seeing multiple attempts in several participants quiz entries indicated that those who took the course not only put in the required studies, but additional work to make take quizzes over to ensure they knew the content before moving on. Retaking quizzes, or minimum scores were never a requirement of the professional development or this study.

One could assume that the educators were enthusiastic about taking this course because of the evaluation piece used for their assessment being ungraded. However, it was surprising to find that although no score threshold was set, almost all participants took quizzes with multiple attempts

until reaching a minimum of an 8/10. Despite not setting a minimum grade, one could assume that there was an intrinsic motivation to do well. In one instance, a participant took a quiz over five times to get a 10/10. In many cases, participants scored a 9/10 and took the quiz over until they scored a 10/10 before turning it in for credit.

Finally, although Act 48 hours were provided (additional required professional development hours from the State of Pennsylvania requiring practicing educators to gain an additional 150 hours of professional development over the course of a five year period to maintain their certificate) as an additional incentive for staff to participate, multiple teachers made note that it didn't matter in choosing the *Learn Mental Health* Modules as their differentiated supervision this school year. What the researcher found was that the staff viewed the information presented as valuable and relevant which was more of a motivator for to take the course than receiving Act 48 credit hours or additional professional development for the year. Since the initial launch of the *Learn Mental Health* course, more than ten additional staff have requested the opportunity to take the modules because of favorable comments from their colleagues.

5.1 Limitations

All professional development has limitations.

One limitation is that we do not know from this study how individual participants applied what they learned. To ascertain the influence of the course on practice, one would have to follow up with observations and other data collection.

It is important to note that the sample size n=46 is not large enough to represent K-12 employees as a whole. Different school dynamics would invariably impact results in other settings.

Even with the limitations presented, the findings of this study produced overwhelming positive results. Every participant scored proficient or higher (80%) with an introductory level to mental health literacy at the completion of the course. Of the 46 participants, all anecdotal feedback, written and verbal was positive. The participants also valued the opportunity to a. take the course at their own pace and b. complete the work outside of school.

5.2 Implications for Further Research

When participants finished each module of the *Learn Mental Health* course they were required to complete the 10 point quiz. The PDF each participant turned in gave the researcher information about their initial and final scores for the quiz results. The information was valuable, but only quantitative in nature. When replicating this study the researcher might want to consider adding a qualitative component for the participants. For example, future research could include a reflection at the end of each module. Analyzing these reflections could reveal the participants insights about present practices and intended use of the information. These reflections could also provide schools with more specific information on modifying professional development to best meet staff needs.

Teacher preparation programs continue to overlook mental health literacy (Brown et al., 2017; Brown et al., 2019) Multiple studies have shown that most teachers do not encounter any professional development on mental health until after they have been employed. (Ohrt et al., 2020)

The present study confirms prior studies calling for the inclusion of teacher Mental Health Literacy studies in the core curriculum of teacher preparation programs.

Implications for Professional Development

We turn now to the two research questions that guided this professional development and its evaluation:

1. How much knowledge has been gained after completing the modules?
2. Which areas of Mental Health Literacy need further professional development based on participant results?

After five months of beginning the *Learn Mental Health* course through the University of British Columbia, all 46 participants finished with 80% or higher scores on all quizzes. According to the authors of the course, all participants successfully acquired an introductory level of knowledge regarding mental health literacy.

In response to Research Question 2. the participants in this study would benefit from further training in, reducing stigma related to mental health issues and student coping strategies for stress and anxiety e.g. modules two and seven. These two topics will be featured in professional development and as we continue to expand our mental health initiative. The implications for those in other districts would be to adopt the *Learn Mental Health* course as a proven resource for their staff. The urgency to provide this professional development is underscored by the growing mental health problems among school age youth.

5.3 Conclusion

To what can we attribute the success of this program in this particular district? Ultimately, staff really do want to be better informed about mental health conditions and yearn for the information provided throughout the *Learn Mental Health* course. As research tells us, staff mental health training is real, relevant, and timely (Climie, 2015).

The finding proved that participants could navigate the course and succeed easily. The videos were high quality and worth participants' time. It is our hope that this study will inspire educational leaders to not only to encourage staff to engage in mental health literacy professional development, but require it.

Until mental health literacy coursework is embedded in teacher preparation programs, it is our duty as educational leaders to ensure that staff are prepared, confident, and willing to address student needs in the classroom. The days of the school counselor "handling" all student emotional needs are a thing of a past. That concept is dated and irresponsible. Mental health literacy isn't just a passing trend it's critical to the physical and mental well-being of educational staff and student bodies alike. For school leaders to meet their education goals it is crucial that they first address students' mental health needs. As this study showed, *Learn Mental Health Literacy* is an outstanding first step.

Appendix A Introductory Script

Dear Faculty & Staff,

You are receiving this email because you indicated you would like to further develop your mental health literacy this school year. To begin, you will first need to enroll in the free, online course *Learn Mental Health Literacy*, through the University of British Columbia. Please see the detailed instructions attached in this email. This course is used frequently in Canada specifically to increase teacher knowledge and give additional support and resources regarding students with mental health concerns in the classroom. Your completion of accompanying quizzes will help guide our district level training for the future.

For this professional development, each participant is required to complete the seven-module, online course by February 1, 2022. All participants will be eligible for Act 48 credit and can use the professional development to fulfill your obligations for your differentiated supervision this school year. At the end of each module in the course, you are required to complete a 10-point quiz to determine if knowledge has been gained. Module four is an exception, containing two quizzes required to complete. You will create a PDF of each quiz taken with all questions and answers visible and submit all eight PDFs to me via email. This will serve as proof of your completion of the program in its entirety. Quiz results will be kept in password protected files.

Additionally, as part of her doctoral work as a student in the School of Education with the University of Pittsburgh (Pitt), Mrs. Julie Skelly will be conducting a program evaluation, entitled "Evaluating an Online Mental Health Literacy Curriculum for K-12 Teachers" on the *Learn Mental Health Literacy* curriculum using data provided from the district. Our Superintendent has approved of this professional development, Act 48 hours, and Mrs. Skelly's doctoral program evaluation.

Thank you in advance for your time and participation,

Dr. Justin Zona

Director of Curriculum, Instruction, and Assessment

Appendix B Instructions for Participants

Dear Faculty & Staff,

I am excited to see you begin the *Learn Mental Health Literacy* course through the University of British Columbia. I believe you will find the knowledge acquired through this seven-module course useful and transferable to your students and classroom practices. Please follow the detailed instructions below to get started.

Enrolling in the Course

1. Follow this link to the University of British Columbia *Learn Mental Health Literacy* Course : https://courses.cpe.ubc.ca/browse/ubcv/faculty-of-education/

2. Click on the first option for the course, *Learn Mental Health Literacy* labeled as FREE at the bottom of the page one.

Screenshot from page one of the *Learn Mental Health* enrollment page inserted here.

3. Click the blue ENROLL button.

Screenshot from page two of the *Learn Mental Health* enrollment page inserted here.

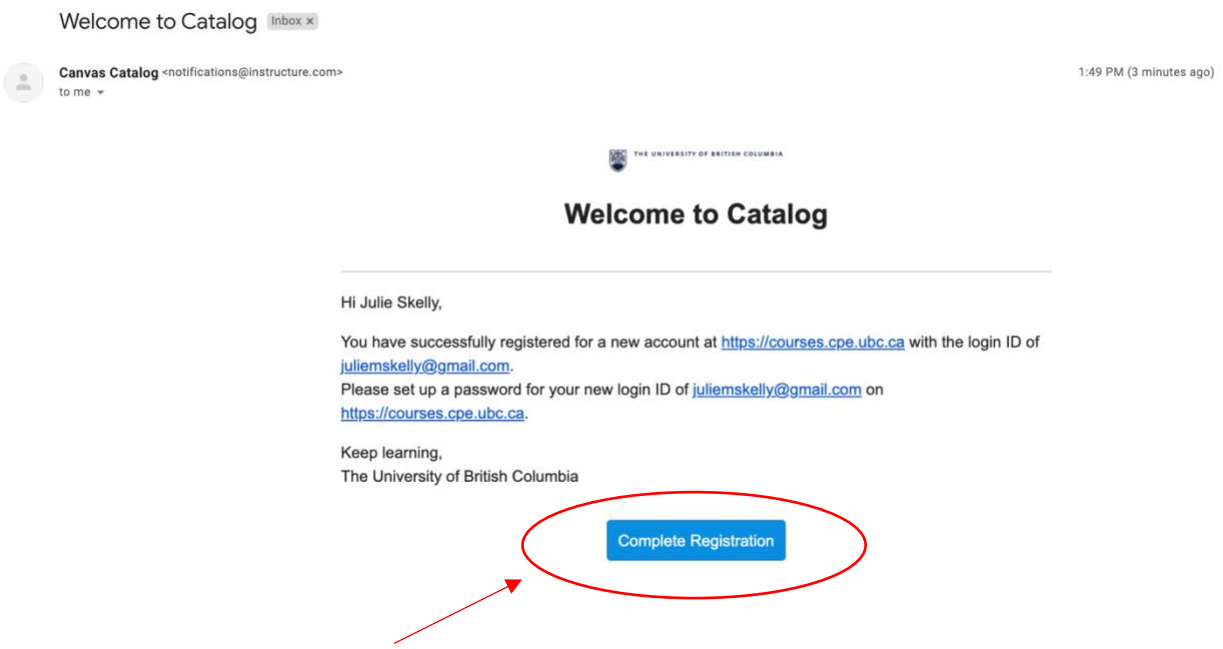
4. Fill out the registration form for the course and click Register New Account.

Screenshot from page three of the *Learn Mental Health* enrollment page inserted here.

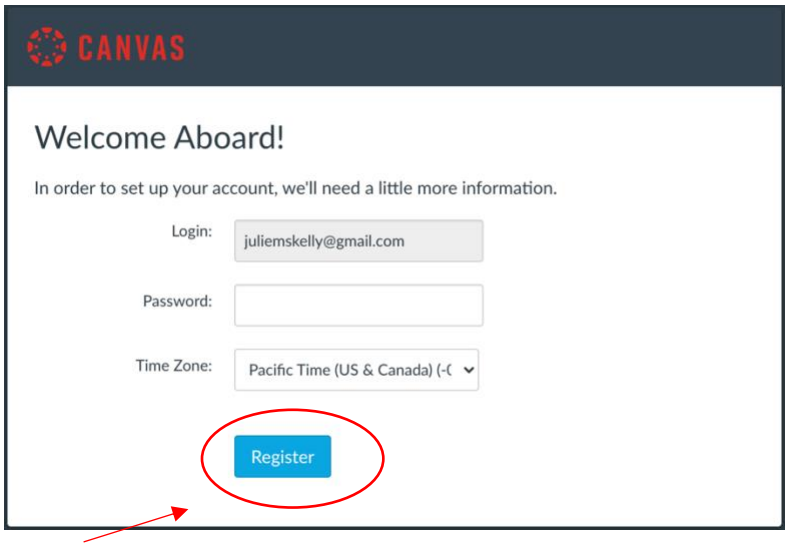
5. After filling out the following form you will be brought to this page:

Screenshot from page four of the *Learn Mental Health* enrollment page inserted here.

6. Check your email for the following from CANVAS and click Complete Registration



7. Create a password and click Register.



8. Bookmark this page for future use and sign-in as you will most likely complete your training over multiple sessions. Click Begin Course.

Screenshot from page one of the *Learn Mental Health* program inserted here.

Navigating the Course

1. You will now be directed to the following page where you may begin the seven-module course and work at your own pace.

Screenshot from the CANVAS page one of the *Learn Mental Health* program inserted here.

2. Please read all text and view all videos in each module.

3. You do not need to complete the "Dive Deeper" sections of the course.
4. At the end of each module, take the 10-point quiz with the exception of module four, containing two quizzes required to complete.

Turning in Work for the Course

1. Create a PDF after each quiz taken with questions and answers visible.
2. Label each PDF with the following format:

    a. Last Name, First Name, Module #
    b. Module 4 has two quizzes, so label those Last Name, First Name, Module4a and Last Name, First Name, Module4b

3. Save each PDF (there will be eight in total).
4. Complete all coursework and quizzes by February 1, 2022.
5. Using the subject heading: *Learn Mental Health Literacy*, attach all eight PDFs of your quiz results and email me at zonaj@fairviewschools.org ***Friday, February 4, 2022.***

On February 1, 2022, the central administration office will send a reminder email requesting your quiz results by ***Friday, February 4, 2022.***

Dr. Justin Zona

Director of Curriculum, Instruction, and Assessment

Appendix C Email Requesting Quiz Results February 1, 2022

Dear Faculty & Staff,

Thank you taking the *Learn Mental Health Literacy* course through the University of British Columbia, and for agreeing to participate in the professional development offered by our district.

Please complete the following:

1. Log into the course and create a PDF for each quiz taken from each module (see example attached) with questions and answers visible.

2. Label each PDF with the following format:
    c. Last Name, First Name, Module #
    d. Module 4 has two quizzes, so label those Last Name, First Name, Module4a and Last Name, First Name, Module4b

3. Using the subject heading: *Learn Mental Health Literacy* attach all eight PDFs of your quiz results and email me at zonaj@fairviewschools.org by this ***Friday, February 4, 2022.***

Dr. Justin Zona

Director of Curriculum, Instruction, and Assessment

Appendix D Attempt Tables

Table 10 Attempts District K-12

LMH Attempts District K-12								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Attempts	1	1	1	1	1	1	1	1
Maximum Attempts	3	5	3	2	3	2	2	5
Range	2	4	2	1	2	1	1	4
Mean	1.26	1.65	1.13	1.2	1.11	1.26	1.17	1.52
Standard Deviation	0.65	0.85	0.4	0.4	0.38	0.44	0.38	0.86
Overall Attempts	1.29 Attempts							

Table 11 Attempts School Building High School

LMH Attempts School Building - HS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Attempts	1	1	1	1	1	1	1	1
Maximum Attempts	3	3	3	2	2	2	2	3
Range	2	2	2	1	1	1	1	2
Mean	1.21	1.71	1.14	1.29	1.14	1.21	1.21	1.64
Standard Deviation	0.58	0.73	0.53	0.47	0.36	0.43	0.43	0.84
Overall Attempts	1.32 Attempts							

Table 12 Attempts School Building Middle School

LMH Attempts School Building - MS								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Attempts	1	1	1	1	1	1	1	1
Maximum Attempts	2	2	2	2	3	2	1	3
Range	1	1	1	1	2	1	0	2
Mean	1.2	1.2	1.2	1.2	1.4	1.4	1	1.6
Standard Deviation	0.45	0.45	0.45	0.45	0.89	0.55	0	0.89
Overall Attempts	1.28 Attempts							

Table 13 Attempts School Building Elementary School

LMH Attempts School Building - ES								
Data	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
Minimum Attempts	1	1	1	1	1	1	1	1
Maximum Attempts	3	5	2	2	2	2	2	5
Range	2	4	1	1	1	1	1	4
Mean	1.3	1.7	1.11	1.15	1.04	1.26	1.19	1.44
Standard Deviation	0.72	0.95	0.32	0.36	0.19	0.45	0.4	0.89
Overall Attempts	1.27 Attempts							

Appendix E Final Questions Missed Tables

Table 14 Final Questions Missed District K-12

LMH Final Scores Specific Questions Missed District K-12								
Questions	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
1	-	-	-	-	-	-	-	1
2	-	4	1	-	-	-	-	-
3	-	1	-	-	-	-	-	-
4	1	-	-	-	1	3	-	1
5	-	1	3	1	-	-	4	-
6	-	1	1	5	1	2	-	2
7	-	-	-	-	-	-	3	3
8	-	1	-	-	-	-	-	2
9	5	3	-	-	-	2	-	-
10	-	1	-	1	-	-	1	1
Totals	**6**	**12**	**5**	**7**	**2**	**7**	**8**	**10**

Table 15 Questions Missed School Building High School

LMH Final Scores Specific Questions Missed School Building - HS								
Questions	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
1	-	-	-	-	-	-	-	1
2	-	1	1	-	-	-	-	-
3	-	-	-	-	-	-	-	-
4	1	-	-	-	-	2	-	1
5	-	-	1	-	-	-	-	-
6	-	-	-	1	1	1	-	-
7	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	2	-	-	-	-	-	-	-

10	-	1	-	-	-	-	-	-
Totals	**3**	**2**	**2**	**1**	**1**	**3**	**0**	**2**

Table 16 Questions Missed School Building Middle School

LMH Final Scores Specific Questions Missed School Building - MS								
Questions	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
1	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	1	-
6	-	-	-	1	-	1	-	1
7	-	-	-	-	-	-	1	2
8	-	1	-	-	-	-	-	-
9	2	-	-	-	-	1	-	-
10	-	-	-	-	-	-	-	-
Totals	**2**	**1**	**0**	**1**	**0**	**2**	**2**	**3**

Table 17 Questions Missed School Building Elementary School

LMH Final Scores Specific Questions Missed School Building - ES								
Questions	**Module 1**	**Module 2**	**Module 3**	**Module 4a**	**Module 4b**	**Module 5**	**Module 6**	**Module 7**
1	-	-	-	-	-	-	-	-
2	-	3	-	-	-	-	-	-
3	-	1	-	-	-	-	-	-
4	-	-	-	-	1	1	-	-
5	-	1	2	1	-	-	3	-
6	-	1	1	3	-	-	-	1

7	-	-	-	-	-	-	2	1
8	-	-	-	-	-	-	-	2
9	1	3	-	-	-	1	-	-
10	-	-	-	1	-	-	1	1
Totals	**1**	**9**	**3**	**5**	**1**	**2**	**6**	**5**

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