

## ABSTRACT

Title of Thesis: UNDERSTANDING SECONDARY EDUCATORS' KNOWLEDGE OF MENTAL HEALTH AND THEIR PERCEPTIONS OF THEIR ROLE IN ADDRESSING STUDENT MENTAL HEALTH

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Adolescents have significant unmet mental health needs and schools represent the most common place for youth to receive mental health services. Teachers are primarily responsible for recognizing and working with students with mental health needs. Scholarship has investigated teachers' knowledge pertaining to signs and symptoms for mental illness and found that teachers report little confidence in their knowledge, and have difficulty accurately identifying students struggling with mental illness. Research has provided some insight into how teachers can promote positive mental health amongst their students but little is known about classroom educators' perceptions about how they can address student mental health concerns. Thus, this qualitative study utilized thematic analysis to investigate 27 teacher/classroom educators' perceptions about how they can help students who struggle with mental health problems. Five main themes emerged from the analysis: 1) school

collaboration, 2) student support, 3) family involvement/family-school partnership, 4) school reform/systematic change, and 5) teacher professional development training. Additionally, the study also investigated educator's knowledge of signs and symptoms of depression, anxiety, and eating disorders. Eighty-five percent of teachers were able to correctly identify depression from a vignette while all participants were able to identify an eating disorder from a vignette. This study provides insights about how to improve school-based mental health efforts, with specific attention to classroom-based educators' role in the provision of services.

UNDERSTANDING SECONDARY EDUCATORS' KNOWLEDGE OF  
MENTAL HEALTH AND THEIR PERCEPTIONS OF THEIR ROLE IN  
ADDRESSING STUDENT MENTAL HEALTH

by

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**Table 1:** Themes and Sample Quotes

Theme	Number of Participants	Percentage	Example Quote
<b>School Collaboration</b>	27	100	
Referrals	27	100	Somebody has to go to the guidance counselor and say, “hey, I’m concerned about this kid. This is what I’ve seen.” Um again and say to the child, “I’ll go with you if you like or you can go on your own but this is not something that we’re gonna ignore. Um I’m concerned about you, I’ve seen, I’ve seen you change over time”
General Within School Collaboration	25	93	Basically through an assessment with the school counselor, and their parent, and their own personal therapy, if they had anxiety attack or panic attack, they were asked to identify a teacher in each building or a teacher who you would want to go to or who would need to be there to assist you, and I was that, he chose me, and I said “okay!”
<b>Student Support</b>	27	100	
Educating Students about Mental Health Literacy	25	93	Um I think just like teaching kids about mental illness, and also, um if you’re gonna go from like the PBIS lens, the um, what did we do in our, in the elementary thing we did “what is mental health?” We did a lesson on mental health and like what that means, and we basically said it means like how you feel about yourself. How you feel about something else, I forget. There were like three parts to it. But it was like teaching the kids, like mental health is not just like a crazy person, like that’s not what it means. It means like, you’re taking care of yourself and you feel good about yourself. You have good self-esteem and you have good relationships with other people, and you treat them well, and they treat you well. And that kind of thing, um, and just getting them thinking about it, so they’re not like getting

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			to the point where they're older and having severe anxiety and not knowing what it is.
Emotional Support	24	89	Always letting your students know, like no matter what the issue, like not even just mental illness, "I'm always here to talk to you. I am a resource for you all." I just think that's really important from like the get go because if they're comfortable talking to you, you can find the resources for them.
Monitoring, Information Gathering, and Triage	22	81	Umm, I've also I think when students are more withdrawn they're going to the cafeteria and you have to figure out why they're not going to the cafeteria. Is it because they're trying to avoid the food, or are they trying to avoid social situation. You have to ask about what's going on. So sometimes, it's a little subtle so you just have to keep probing.
Classroom Accommodations	18	67	And I've had another student like that before too um, she had anxiety and it was known by counseling so they actually told all her teachers about it so she had a pass. So, if she felt like she had a lot of anxiety, she could just use the bathroom for a bit or go see counseling.
Encourage Help-Seeking	17	63	For me it was kind of just simple, it wasn't just simple for me to bring her because she didn't necessarily feel comfortable going to the school counselor umm because it was like an issue with people in the school and she wasn't sure what was going to happen so I kind of had to like coach her through that counseling is kind of confidential and that kind of thing. Um, but it was like kind of hard to get her in there initially and then once we were in there, she told me that she was like, that she was uncomfortable talking to like males, and she had to see a male counselor so it was kind of an awkward dynamic because she was like talking through me and I was talking to him but she, she, I mean, she talked to him and we got it some of the way figured out and then they kind of took it from there. Like, once they were at a comfortable level to both be able to talk to each other without me there.
Problem-Solving	12	44	Like oh you're freaking out great tell me about it, let's figure out how to do what you need to do.

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Involve Student in Engaging and Meaningful Activity	11	41	I think in teachers to help find things that the students are really good at and give them opportunities to show that, to show them they are um, they are very good students and they are very nice and so I think that's where maybe a teacher can come in, maybe find subjects specifically or activities that that student is good at and give them some of that, help them build some of that confidence up so that seems to be a confidence issue.
<b>Family Involvement/School Partnership</b>	24	89	
Family Contact	22	81	I feel like if I'm going to write a referral for something like depression, I would call the parents and just be like, "hey, I wrote this referral for these reasons, is this something you're seeing at home? Um, you know, if not then something's going on at school that we should cooperate on and you know figure out but you know if you are, maybe you know you can follow up with the counselor and seek outside support if necessary and just maybe like a little more aware of it.
Community Referrals	20	74	I think a doctor would be helpful and sort of a safe recommendation. A lot of my choices in this category were sort of what would help the kid even a tiny bit maybe, and what would not put me or the school at risk in terms of liability. And so saying to someone, you should ask your doctor about that, there's never there's no way to go back and maybe it would help maybe it wouldn't but it's not gonna be harmful and no one can say to you like how dare you recommend someone talk to a doctor?
<b>School Reform/Systematic Change</b>	22	81	
Incorporate into Curriculum	16	59	I would collaborate with different teachers and subjects so I would talk about in P.E. and health, "what it's like to exercise regularly, be healthy, what does that mean? What is the difference of being healthy and being a blah?" So in biology, talking about the biology of it in terms of sugars and fats and that could bring a lesson of how that works. Um, math, give them the statistics of it.
School Climate	13	48	But I think it's also, requires strong systems of support and a strong culture at the school and at the family level in general. The stronger a school culture has, um, the stronger a culture the school has, rather, um the more that people in the school are going to be aware of the situation, the more

Procedural Aspects	8	30	capable they are of recognizing problems, and sharing information just like there's, perhaps there's a system set up in place but perhaps just teachers, teachers see the students regularly and they communicate information about them. They know them personally, intimately, they're gonna be more capable of picking up uh the minor details that are going wrong. Also with ED, yeah we have an open door policy for our students to go speak to a counselor, but sometimes I feel like we can make more of an impact if it's actually on a student's IEP. Um, I don't know, that's something I've been fighting with. My school never wants to put counselor's names on IEPs and they look at me like I'm insane, because it'd just make more work and I know that but at the same time, I feel like it's more likely to get done if it's on an IEP.
<b>Teacher Professional Development Training</b>	16	59	
Increased Awareness of Mental Health	15	56	That starts with our being educated and like having you know we have... teachers have so many professional developments, that school administration pays for and like provides access to teachers. And so it just takes one like once a month from the school counselors for here like here's the stats of what's going on with our students and how they feel about this thing and here's what you can do as the teacher as you see students going through things and the issues. Like it doesn't take that long so that's the first step and then see where it goes.

**Table 2:** Themes by Participant Demographic Characteristics

Total (N=27)	Gender		Age			Experience			School Type	
	Male (n=11)	Female (n=16)	20-29 (n=17)	30-39 (n=6)	40+ (n=3)	1-2 years (n=7)	2.01-3 years (n=9)	>3 years (n=11)	Public (n=15)	Private (n=10)

<b>Family Involvement &amp; Family-School Partnership</b>	24 (89)	11(100)	13(81)	14(82)	6(100)	3(100)	6(86)	8(89)	10(91)	13(89)	9(90)
Family Contact	22(81)	11(100)	11(69)	13(76)	5(83)	3(100)	5(71)	8(89)	9(82)	11(73)	9(90)
Community Referrals	20(74)	10(91)	10(63)	12(71)	5(83)	2(67)	6(86)	6(67)	8(73)	73(80)	8(80)
<b>School Collaboration</b>	27(100)	11(100)	16(100)	17(100)	6(100)	3(100)	7(100)	9(100)	11(100)	15(100)	15(100)
Within School Collaboration	25(93)	10(91)	15(94)	16(94)	6(100)	2(67)	6(86)	9(100)	10(91)	13(87)	10(100)
School Referrals	27(100)	11(100)	16(100)	17(100)	6(100)	3(100)	7(100)	9(100)	11(100)	15(100)	10(100)
<b>School Reform/Systematic Change</b>	22(81)	8(73)	14(88)	14(82)	5(83)	2(67)	5(71)	8(89)	9(82)	13(87)	8(80)
Incorporate into curriculum	16(59)	6(55)	10(63)	10(59)	3(50)	2(67)	4(57)	6(67)	6(55)	11(73)	4(40)
School Climate	13(48)	6(55)	7(44)	7(41)	4(67)	1(33)	2(29)	4(44)	7(64)	9(60)	4(40)
Procedural Aspects	8(30)	4(36)	4(25)	5(29)	2(33)	0(0)	2(29)	2(22)	4(36)	6(40)	2(20)
<b>Teacher Professional Development Training</b>	16(59)	7(64)	9(56)	10(59)	4(67)	1(33)	4(57)	7(78)	5(45)	9(60)	6(60)
Increase Awareness of Mental health	15(56)	6(55)	9(56)	9(53)	4(67)	1(33)	4(57)	6(67)	5(45)	8(53)	6(60)
<b>Student Support</b>	27(100)	11(100)	16(100)	17(100)	6(100)	3(100)	7(100)	9(100)	11(100)	15(100)	10(100)
Education	25(93)	9(82)	16(100)	17(100)	4(67)	3(100)	6(86)	9(100)	10(91)	14(93)	10(100)
Classroom Accommodations	18(67)	6(55)	12(75)	10(59)	4(67)	3(100)	4(57)	5(56)	9(82)	11(73)	6(60)

Involving Student in Engaging and Meaningful Activity	11(41)	2(18)	9(56)	7(41)	2(33)	1(33)	0(0)	5(56)	6(55)	7(47)	4(40)
Encourage Help-Seeking	17(63)	5(45)	12(75)	10(59)	4(67)	2(67)	5(71)	5(56)	7(64)	10(67)	5(50)
Problem Solving	12(44)	4(36)	8(50)	8(47)	1(17)	2(67)	3(43)	3(33)	6(55)	7(47)	14(93)
Emotional Support	24(89)	10(91)	14(88)	16(94)	5(83)	2(67)	6(86)	9(100)	9(82)	14(93)	9(90)
Monitoring, Information Gathering, and Triage	22(81)	10(91)	12(75)	12(71)	6(100)	3(100)	4(57)	7(78)	11(100)	11(73)	9(90)

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## Chapter 1: Introduction

An estimated 20% of adolescents experience a psychiatric disorder (Kataoka, Zhang, & Wells, 2002) but unfortunately, only 20 to 50% of children with mental health needs receive services or treatment (Kataoka, Zhang, & Wells, 2002; Samargia, Saewyc, & Elliott, 2006). The majority of youth who receive mental health services access it in schools. Though schools vary in the type and intensity of mental health services they offer (Bruns, Walrath, Glass-Siegel, & Weist, 2004) research demonstrates that mental health interventions can be successfully integrated into schools. School-based services are related to a reduction in students' depression and anxiety symptoms (Mychailyszyn, Brodman, Read, & Kendall, 2012) a decrease in academic struggles associated with mental health difficulties (Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010), lower stigma associated with service utilization (Schachter et al., 2008), and fewer barriers to service among diverse youth (Lyon, Ludwig, Stoep, Gudmundsen, & McCauley, 2013).

Despite the ability for youth to self-refer for school-based services, the most common route through which school-based services are obtained is through teacher referral/nomination or universal screening methods (Dever, Dowdy, Raines, & Carnazzo, 2015). In addition to facilitating service, teachers are leaders in providing some mental health prevention and intervention services (Franklin, Kim, Ryan, Kelly, & Montgomery, 2012). Because of teachers' role as both gatekeepers for services and as intervention implementers, it is essential to understand teachers' knowledge about youth mental health and mental illness.

Teachers report a lack of confidence in their knowledge about identifying youth with depression (Moor et al., 2007) and in their ability to talk to students about mental health problems (Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010). Further, when teachers are asked to indicate students suspected of being anxious or depressed, only 50% of struggling students are correctly identified by teachers (Cunningham & Suldo, 2014). Since teachers report a lack of confidence in their mental health knowledge, and since youth with mental illness experience a variety of symptoms, it is important to understand the signs and symptoms that teachers do recognize in their students struggling with mental illness.

In an effort to improve teachers' awareness for student mental health issues, teacher training programs have been developed to increase various aspects of mental health literacy (e.g. enhance mental health knowledge and instill confidence in helping students). These programs aim to increase teachers' capacity to provide school-based mental health services and refer students who exhibit concerning behaviors (Moor et al., 2007). While increases in mental health knowledge frequently leads to positive outcomes, teachers' role in addressing student mental health concerns extends beyond recognizing students exhibiting concerning symptoms. Teachers implement mental health interventions (Stan Kutcher, Wei, & Morgan, 2015; Landrum, Tankersley, & Kauffman, 2003), adapt their curricula, collaborate with school personnel, and bridge the gap between the classroom and the families of their students. Since classroom educators play an integral part in addressing student mental health needs, it is important to gain a deep understanding of what educators think they can do to address student mental health concerns in the school setting.

## Chapter 2: Literature Review

### *The School Setting as A Service Utilization Site*

Students at risk for depression report utilizing school based services 33% more frequently than specialty mental health services and schools are four times more likely to provide services for depression than primary care facilities (Lyon et al., 2013). Recognizing the number of students that schools serve for mental health needs, a relatively nascent area of literature has emerged looking at the effects of mental health services in the school setting, as well as factors that broaden their reach and enhance their effects.

Schools vary in the variety and intensity of mental health services they offer (e.g. Bruns, Walrath, Glass-Siegel, & Weist, 2004; Colognori et al., 2012). School-based mental health centers (SBMHC) are attached to schools, typically staffed with licensed psychologists, and provide comprehensive mental health services in the school setting (Bruns et al., 2004). The centers are associated with increased attendance amongst specific populations (e.g. low-income students with asthma) and steeper increases in GPA among those utilizing the mental health services (Walker et al., 2010; Webber et al., 2003). While SBMHC are increasing in prevalence and associated with positive outcomes, it is more common for schools to provide mental health care within the more traditional framework using school psychologists, school counselors, school social workers, paraprofessionals, and teachers (both general education and special education). Even without attached SBMHC, a meta-analysis has suggested that schools are generally able to successfully implement mental health

interventions, reducing depression and anxiety symptoms in students (Mychailyszyn et al., 2012).

Despite encouraging findings regarding the school's capacity to improve functioning and reduce symptoms associated with mental illness, many youth continue to have unmet mental health needs (Kataoka et al., 2002). This need-utilization gap is substantially smaller when scholars include the school setting as a treatment place. Recent work suggests that when the school setting is included as a point for service utilization, greater than 50% of youth with elevated depression receive care (Lyon et al., 2013), which is substantially higher than previous studies which have neglected schools as an access point and therefore estimate that only 20% of children in need of mental health services receive them (Kataoka et al., 2002). Further, racially/ethnically diverse and/or low-income children are significantly less likely to receive services than their White and/or affluent peers in the community sphere (Cauce et al., 2002) but equally likely to receive services in the school setting (Lyon et al., 2013). Barriers to care that disproportionately affect diverse students may not be as large in the school setting as they are in the community. School services may play an integral role in reducing the need-utilization gap for all students, but especially for ethnically and racially diverse students.

The school setting provides mental health services for a substantial number of students. Some schools provide intensive on-site mental health services through mental health centers and many more are increasing in their general capacity to provide prevention programs even within the general education classroom. Growing out of special education services (Bower, 1960), school based mental health efforts



alleviate mental health and behavior symptoms (Mychailyszyn et al., 2012), reduce academic struggles associated with mental health difficulties (Walker et al., 2010), provide access to a broader range of youth in need of services (Lyon et al., 2013), and reduce stigma associated with service utilization (Schachter et al., 2008). In the school setting, teachers spend substantial amounts of time with students and are uniquely positioned to observe concerning student behaviors, implement preventative services, and support school psychologists/social workers in providing more specialized services.

### *Teachers Role in Helping Students with Mental Health Difficulties*

Teachers work with students for up to eight hours a day, uniquely positioning them to observe behavior, social interactions among students, and changes in mood and functioning. Therefore, teachers are ideally situated to notice concerning signs and symptoms of mental health difficulties. In addition to teachers' unique position allowing them to observe problems and intervene, teachers also play a prominent role in implementing prevention-based programs. I start by first broadly reviewing teachers' role in prevention and intervention before illustrating the need for understanding teachers' mental health literacy. Finally, I discuss teachers' role in alleviating mental health difficulties and/or in developing positive mental health among students.

Legislation such as The President's New Freedom Commission on Mental Health (2003) and the emergence of multi-tiered systems of support models (e.g., PBIS, RTI) has expanded teachers' role in school-based mental health. The

President's New Freedom Commission on Mental Health (2003) states school mental health decreases access barriers and facilitates stronger treatment (Hogan, 2003). Mental health promotion efforts implemented as components of multi-tiered systems have led to an increase in social emotional curricula implemented in general education classrooms by classroom educators (Arora et al., 2019). In part due to these paradigm shifts, teachers are involved in prevention programs, which serve as protective factors against future mental health difficulties (Corrieri et al., 2014). For example, an SEL program called Positive Action has been shown to increase positive affect and reduce future depression and anxiety in low-income urban youth (Lewis et al., 2013). Universal mental health prevention efforts such as the MHFA curriculum (implemented by general education teachers), are associated with increases in teachers' mental health literacy as well as increased confidence when working with youth with mental health difficulties (Gryglewicz, Childs, & Soderstrom, 2018).

Across the literature, teachers have been regarded as gatekeepers for school mental health services (Miller et al., 2015; Rickwood, Deane, & Wilson, 2007; Splett et al., 2018, Williams, Horvath, Wei, Van Dorn, & Jonson-Reid, 2007) since they are "in a natural position to carry out informal surveillance, detection, and assistance for those in need" (Cross, Matthieu, Cerel, & Knox, 2007). Highlighting the emphasis placed on teacher gatekeeping, teachers are responsible for the most common route through which specialty school-based services are obtained (Bruns et al., 2004; Dever et al., 2015). In fact, in a study evaluating referrals for mental health services, over 50% of teachers had made a referral compared to only 30% of non-teachers (Bruns et al., 2004).

In order for teachers to lead mental health prevention and intervention efforts, as well as effectively function as gatekeepers for mental health services, teachers must have a strong knowledge of positive mental health as well as the signs and symptoms associated with psychopathology. Further, to help students displaying concerning symptoms, teachers must be aware of appropriate actions to effectively intervene and facilitate treatment. I argue that the framework for mental health literacy (Jorm et al., 1997) serves to aid conceptualization of teachers' perceptions, understanding, and awareness of mental illness, and therefore must be emphasized when investigating teachers' role in school mental health. However, mental health literacy is inadequate in fully conceptualizing teachers' role in school mental health since it does not account for all factors involved in school mental health. Therefore, I complement Jorm et al.'s (1997) construct of mental health literacy with Atkins, Hoagwood, Kutash, and Seidman's (2010) model for integrating mental health services into education systems. Together, these frameworks guide my review of teachers' role in promoting student mental health.

### *Teachers' Mental Health Knowledge 3*

Research aimed at investigating teachers' understanding of mental illness has, for the most part, focused on investigating teachers' mental health knowledge despite the need to also understand teachers' thoughts, attitudes, and actions teachers take as relevant to school mental health. Jorm and colleagues' (1997) provided a framework for determining individuals' awareness, perceptions, and understanding of mental illness, stating that mental health literacy (MHL) represents the "knowledge and

beliefs about mental disorders which aid their recognition, management, or prevention” (p. 182). More recently Kutcher, Wei, and Coniglio (2016) concluded MHL is responsible for “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). Despite this increased emphasis on MHL as a comprehensive framework represented by multiple components, most research on student mental health involving teachers focuses either on assessing teachers’ knowledge of mental illness or on efforts to improve an aspect of their MHL. Thus, I focus on the MHL component that emphasizes understanding mental disorders. This component aligns with research exploring teachers’ mental health knowledge.

There are four common methods scholars use to evaluate teachers’ understanding and knowledge of mental illness. The most common method asks teachers to respond to vignettes depicting students struggling with various difficulties. The second category of work evaluates teachers’ perceived knowledge based on their confidence in helping students with mental health difficulties. A third category of work determines teachers’ actual mental health knowledge by assessing their performance on questionnaires. Finally, the fourth way scholars gauge teachers’ understanding of mental health issues is by comparing teacher referrals for mental health needs to students’ self-report evaluations of their mental health symptoms.

Research teams, both domestically and internationally, have written vignettes depicting students struggling with various mental illnesses. These vignettes highlight symptoms of a mental disorder and are administered to teachers to evaluate individuals' understanding and awareness for concerning symptoms. These types of studies have been conducted with teachers for an assortment of disorders (e.g. psychosis, anxiety, depression, ODD). Scholars use these studies to determine if teachers (1) recognize the signs and symptoms of the disorder depicted, (2) accurately differentiate between various severity levels of disorders depicted and/or (3) judge severity or referral decisions based on the gender of the character in the vignette or on type of disorder (internalizing vs. externalizing) depicted.

In general, these studies show that across disorders and genders, teachers generally recognize concerning vignette depictions and make accurate distinctions between clinical and sub-clinical depictions. While these studies suggest teachers recognize the signs and symptoms of mental illness, each study's distinct methodology presents nuance in showing how teachers understand and provide support for students with mental health concerns. For example, Loades and Mastroyannopoulou (2010) presented primary school teachers with six vignettes (one with typical anxiety symptoms, one with sub-clinical separation anxiety symptoms, one with clinical separation anxiety symptoms, one with typical defiance symptoms, one with sub-clinical oppositional and defiant symptoms, one with clinical oppositional and defiant symptoms) and found that over 90% of teachers accurately recognized that the students depicted in the clinical vignettes were experiencing a problem. Similar to Percy, Clopton, and Pope (1993), Loades and

Mastroyannopoulou (2010) found that teachers accurately perceived vignettes depicting more severe concerns as more problematic than the sub-clinical or typical vignettes, and this held true for vignettes depicting youth with internalizing and externalizing concerns. Percy et al. (1993) found that in real life, teachers claimed to be more likely to make a referral for an externalizing problem as the students' externalizing symptoms increased in severity. Contradicting vignette findings suggesting that teachers would make more referrals for students with internalizing and externalizing concerns as symptoms increase, teachers stated that in real life, students with more severe internalizing symptoms are less likely to be referred than those with sub-clinical internalizing findings (Percy et al., 1993). These seemingly ironic findings may not reflect a lack in teachers' understanding of internalizing symptoms. Instead, as children get more anxious, they may become more withdrawn and therefore more likely to be overlooked by teachers. In sum, vignette studies suggest that teachers recognize concerning symptoms depicted in vignettes but may struggle more with identifying mental health concerns among real-life students, especially those struggling with internalizing symptoms. These findings could reflect that teachers have knowledge of symptoms that are indicative of mental illness but struggle to transfer this knowledge to real-life situations. Alternatively, teachers may have adequate knowledge in real-life situations but students may not experience all of the symptoms depicted in vignettes in actual classroom settings. Therefore, additional scholarship is necessary for better understanding teachers' actual mental health knowledge.

In addition to evaluating mental health knowledge through teachers' response to vignettes, teachers' knowledge is also through questionnaires and tests, often before teachers receive training to improve mental health knowledge. Questionnaires suggest that teachers perceive a lack of confidence in their knowledge about depression (Moor et al., 2007) and in their ability to talk to students about mental health problems (Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010). In addition to administering perception questionnaires to teachers, the third way scholars assess mental health knowledge is by evaluating teachers' performance on mental health knowledge tests. For example, Sciutto, Terjesen, and Frank (2000) studied primary teachers' knowledge of ADHD symptoms by administering the KADDS, a 36-item survey that allows teachers to select "true," "false," or "I don't know" for each item. The scale measures teachers' awareness and misperceptions of ADHD symptoms, treatment, and other general information. Teachers scored highest on the symptom portion of the scale (63% on symptom portion vs 43% on both the treatment and general information portion) and had the fewest misperceptions regarding ADHD symptoms in comparison to general and treatment knowledge. Sometimes, mental health knowledge tests are administered to determine the effect of a training and are thus given pre and post training. Because of the unique purpose of these tests, scores tend to reflect general mental health knowledge rather than something more specific such as percentage of correctly identified symptoms. On these tests, teachers typically perform with 50% accuracy (Jorm et al., 2010).

Cunningham and Suldo (2014) conducted one of the first studies to evaluate teachers' understanding of students' mental health needs in real world settings.

Teachers are assumed to have a strong understanding of student mental illness when they nominate the same students flagged by student self-report screeners. Typically, students with externalizing disorders tend to underreport problematic behaviors (Sibley et al., 2010), and are more likely to get referred for services. Students with internalizing disorders, on the other hand, are often more difficult to identify and more likely to be overlooked (Papandrea, 2011). Thus, scholars have focused on teachers' recognition of students struggling with depression and/or anxiety symptomatology finding that, unfortunately, only 50% of students with self-reported above-threshold depression symptoms and 41% of students with self-reported above threshold anxiety symptoms were identified by their teachers. Their findings further corroborate prior scholars' teacher nomination research. For example, in Australia, students were identified for an anxiety treatment through two primary mechanisms: 1) teacher nomination and 2) self-report screening (Dadds, Spence, Holland, Barrett, & Laurens, 1997). Of the 361 students identified for the treatment, only 33 were flagged by both a teacher and their score on the self-report screen. Low rates of alignment between teacher nomination and student self-report measures may reflect a lack of teachers' understanding of student mental health need or, it may be indicative of students experiencing symptoms that are difficult for teachers to detect (Cunningham & Suldo, 2014), potentially because students hide symptoms due to the stigma associated with mental illness.

Although vignette studies often suggest that teachers have an understanding of students' internalizing mental health difficulties, other methods for assessing teacher mental health knowledge (e.g. perceived confidence measures, knowledge tests, and



teacher nomination studies) suggest that teachers do not have a thorough understanding of youth mental health. Since teachers often cite inadequate training and limited knowledge as reasons for which they do not feel comfortable identifying and helping students with mental health disorders, efforts to improve teacher mental health knowledge have been investigated as possible means through which to improve teachers' ability to recognize struggling students as well as teach students about mental health (Gryglewicz et al., 2018; S Kutcher, Wei, McLuckie, & Bullock, 2013; Stan Kutcher et al., 2016). Efforts to improve teachers' mental health knowledge (and mental health literacy, more broadly) may go beyond helping teachers increase their knowledge of mental health and may further develop teachers' role in school mental health. For example, teachers receiving a MHL intervention have experienced an increase in mental health promotion, stating they would be more likely to endorse school policies that advance mental health dialogue and/or help students struggling with mental health problems (Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010). Teachers receiving mental health first aid interventions are also more likely to report an increased confidence and intention to help students displaying concerning symptoms, which has more recently been corroborated by other scholars (Gryglewicz et al., 2018). More specifically, another mental health training, focusing on helping teachers support students struggling with suicidal thoughts, helped teachers take a student's suicidal verbalizations seriously and increased the likelihood that teachers said they would refer the student to a counselor and/or call the student's parents (Davidson, 1999).

In conclusion, teachers' mental health knowledge, a component of mental health literacy, is not fully known. Scholarship suggests teachers have limited knowledge about student mental health issues, which impairs their ability to recognize struggling students and intervene when appropriate. Efforts to improve mental health literacy have suggested that teachers' mental health knowledge can be improved. However, in order to fully reap the benefits of mental health training initiatives, it is essential that teachers' knowledge of mental health and their perceptions regarding their role in promoting school mental are better understood. MHL provides a framework for understanding teachers' awareness and attitudes about mental health, but additional factors (e.g. teachers' role in communicating with parents about mental health difficulties, school level characteristics that impact teachers' role) must also be explored as contributing pieces of teachers' success in fulfilling their role in promoting mental health among students. Therefore, I complement Jorm's framework of MHL by utilizing Atkins, Hoagwood, Kutash, and Seidman's (2010) framework for the effective integration of mental health services and the school system.

### *Teachers' Role in Promoting Student Mental Health*

Classroom educators identify and refer students displaying concerning symptoms but this comprises only a fraction of their duties pertaining to school-based mental health. Teachers support students in their day-to-day lives and implement mental health interventions, ranging from tier one prevention efforts through tier three individualized plans (Stan Kutcher et al., 2015; Landrum et al., 2003). Atkins, Hoagwood, Kutash, and Seidman (2010) provide a framework for understanding how

mental health services can be integrated into education systems. The framework discusses how mental health services can be incorporated into the school setting on a broad level, but I use their framework to guide my literature review on teachers' role in promoting student mental health.

Atkins et al. (2010) argues there are six main factors implicated in the successful integration of mental health systems into schools: (1) utilization of an ecological approach, (2) optimization of indigenous or naturalistic resources within schools, (3) diffusion of innovation and social network theory, (4) integration of promotion, prevention, and intervention models and the use of providers across levels, (5) attention to outcomes for all students and, (6) expansion of parental involvement. Teachers and other classroom educators play a role in each of these factors.

#### Utilization of an Ecological Approach

Bronfenbrenner's seminal piece on ecological theory states that youth develop as a function of their immediate and extended contexts (Bronfenbrenner, 1979). Atkins et al. (2010) uses Bronfenbrenner's theory and applies it to school based mental health services. Bronfenbrenner proposed that human development occurs as a result of one's environment, ranging from microsystem level factors (e.g. home, school) to macrosystem level factors (e.g. culture). In between micro and macro factors are mesosystem factors, representing the interconnections between micro factors. Atkins et al. (2010) argues for the utilization of an ecological framework when considering school mental health services, indicating that mental health interventions should be implemented in the classroom since learning occurs in the

social environment of classrooms. Therefore, the classroom represents an ideal setting to target social-emotional skills, leading to an increase in academic proficiency. Supporting Atkins and colleagues' (2010) extension of ecological theory into the classroom, social emotional interventions, which are often implemented by teachers, have by and large been associated with increases in achievement and behavior (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

#### Harnessing Naturalistic Resources

Efforts to provide mental health supports in the school are often hampered by logistical oversights and competing demands (Langley, Santiago, Rodríguez, & Zelaya, 2013). In order to overcome these barriers, schools should optimize their naturalistic and extant resources (Atkins et al., 2010). To help students with mental health difficulties while efficiently optimizing existing resources (e.g. teachers), schools must ensure they 1) acknowledge and clarify educators' roles in school mental health and 2) take advantage of existing school schedules when implementing interventions.

Teachers are often primarily considered for their role in academic instruction but their involvement in providing mental health interventions must also be acknowledged. In fact, some scholars argue that interventions (ranging from social skills training, behavioral interventions, and therapy/counseling) are most successful when administered at least in part by teachers (Wilson, Lipsey, & Derzon, 2003). A review conducted by Franklin et al. (2012) supported this claim, finding that teachers and specialty mental health providers have equally positive outcomes when implementing interventions. Further, teachers are actively involved in 40% of

interventions, and are the sole implementer in approximately 20% (Franklin et al., 2012).

Teachers' role in the provision of services varies contingent on the type of intervention. For example, some interventions may be integrated into existing lessons whereas others may require time set aside for implementation. The Mental Health and High School Curriculum Guide, evaluated by Kutcher et al. (2015), is an inexpensive and relatively straight-forward curriculum to be administered by teachers. After implementation, students demonstrated increased mental health knowledge and increased positive attitudes towards mental illness (e.g. decrease in stigma pertaining to mental illness). While the Mental Health and High School Curriculum Guide requires schools to adopt the intervention and support teachers in finding time to provide lessons, teachers may self-elect to implement interventions that require only a slight adaptation of their existing lesson structures. Peer tutoring, for example, is an effective method to teach reading instruction among students with emotional and behavioral disorders (Rivera, Al-Otaiba, & Koorland, 2006). Further, for children with behavioral concerns, whole-class procedures for transitions and class-wide routines such as silent reading may work to increase attention, improve behavior, and enhance social skills (Atkins et al., 2010; Rivera et al., 2006).

Teachers successfully implement interventions and teachers' inclusion in service provision optimizes a natural resource. However, when schools adopt new mental health interventions and utilize teachers as implementers, school systems must ensure teachers have confidence in the effects of the program and believe it has a long-term place in the school (Langley et al., 2013). This may be facilitated by

identifying a school person (e.g. teacher, coach, school psychologist) who is already invested and knowledgeable about school mental health and can serve as an internal prevention specialist (Domitrovich et al., 2008), building the professional network so teachers gain support from one another (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010).

In addition to utilizing teachers' presence in the classroom and possibly as an internal prevention specialist, school mental health providers (e.g., social workers, psychologists, or counselors) should also be integrated with existing class structures to assist teachers and to implement interventions requiring specialized training.

Teachers attribute the taboo nature of mental health difficulties in part to a lack of classroom dialogue around mental health. Introducing specialty providers into the classroom may help teachers increase and enhance their dialogue around mental health leading to a reduction of stigma associated with mental illness (Buchholz, Aylward, McKenzie, & Corrigan, 2015). For schools in which it is unfeasible for mental health providers to enter the classroom, teachers can independently lead mental health dialogue. By building strong one-on-one relationships with students and disclosing their own personal experiences with mental illness, teachers may help their students feel more comfortable discussing mental health difficulties (Buchholz et al., 2015). Teachers argued disclosing their own mental health struggles provides numerous benefits to students such as promoting genuineness, openness, vulnerability, and help-seeking behaviors (Buchholz et al., 2015).

Taken together, schools can utilize teachers, a natural resource in the school, to improve students' mental health outcomes. However, for teachers to be optimized

as natural resources, schools should identify an internal implementation specialist (e.g. coach) to enhance teachers' confidence in interventions and to promote the longevity of an intervention. In addition, teachers' mental health roles must be clear to ensure teachers are not over-burdened with mental health promotion responsibilities. Heeding these recommendations, teachers effectively build upon existing classroom structures, enhance dialogue around mental health (Jorm et al., 2010), and reduce student mental health difficulties by implementing interventions (Arora et al., 2019).

#### Diffusion of Innovation and Social Network Theory

Atkins and colleagues' (2010) argue the success of an intervention is in part contingent on the social network within the school. In order for an intervention to get off the ground and be sustained, the school culture must be one which values buy-in from all stakeholders (e.g. parents, families, students, district, school staff), although this may be attained through long term efforts (Atkins et al., 2010; Kataoka et al., 2003). Collaboration and communication between stakeholders is essential and may be facilitated through emails, newsletters, phone calls, or meetings (Langley et al., 2013).

In schools with limited collaboration between staff, misunderstandings occur and uninformed decisions may be made. For example, some scholars fear teachers may attempt to independently provide help to students in need of specialty mental health services, leading to situations in which students are in distress by the time they are referred for more intensive services (Frauenholtz, Mendenhall, & Jungrim Moon, 2017). Collaboration with mental health providers, however, may educate teachers

regarding the appropriate time to refer a child. While teachers may benefit from this increased understanding, another reason teachers may refrain from initiating future referrals could be due to residual frustration from referring a student and receiving inadequate follow-up from the mental health provider (Ekornes, 2015). Teachers want to feel confident their students' needs are being met, and in fact, a lack of communication between staff may be so severe it leaves teachers doubting their referred students are actually evaluated. While confidentiality restrictions limit providers' ability to communicate with teachers, dialogue and collaboration between staff may lead to mutual understanding regarding a school's referral and evaluation process. Complications between teachers and mental health providers may also arise since students with greater needs frequently require pull-out services resulting in missed academic instruction. Teachers may perceive that addressing student mental health needs leads to sacrificing academic needs. Communication may also mitigate this issue since teachers argue collaboration among providers can lead to a consistent schedule for necessary pull-out services (Langley et al., 2013). Therefore, if teachers are aware of when a student will miss class, the teacher can plan accordingly and ensure the student receives missed material (Langley et al., 2013). In sum, social networks between teachers and school mental health providers are essential for rectifying challenges and attaining mutual understanding regarding school mental health services.



#### Attend to Outcomes for All Students

Schools have moved towards employing a public health model for the prevention and treatment of mental health difficulties (Strein, Hoagwood, & Cohn, 2003). In theory, this model serves students without current mental health needs through prevention and serves those with the most severe difficulties through interventions. However, special care is essential for ensuring all students receive adequate care (Atkins et al., 2010). Models such as PBS and RTI provide fairly clear guidelines for how to provide universal and secondary supports but additional focus should be directed towards developing models to help teachers in supporting students with more intensive needs (Atkins et al., 2010).

#### Integrate Promotion, Prevention, and Intervention Models

Schools enhance their efficiency in providing mental health services by integrating models and utilizing providers across all care levels (Atkins et al., 2010). Both specialty mental health providers and teachers have a role in mental health promotion, prevention, and intervention efforts.

Teachers are predominantly involved in universal (or tier one) interventions aimed at preventing mental health problems from emerging (Franklin et al., 2012). They are also involved in the second and third tiers of support where their efforts focus on reducing or treating mental health difficulties (Franklin et al., 2012). Tier one mental health efforts typically focus on managing behavior through positive behavior supports (PBS; Sugai & Horner, 2002) and SEL lessons (social skills, anger management; Domitrovich et al., 2008). Although PBS is not always associated with mental health, it reduces problem behaviors which are often the earliest signs of

mental health difficulties (Moon, Williford, & Mendenhall, 2017). Therefore, PBS and SEL programs may reduce the risk for future emotional and behavioral disorder diagnoses. In the second tier, teachers help students showing moderate risk for developing mental health difficulties by leading small group SEL interventions. In the third tier, teachers can be integrated into their students' counseling sessions which are led by a mental health provider (Berzin et al., 2011). Teachers also have a lead role in providing tier two and three mental health services when they are responsible for facilitating classroom interventions like Daily Report Cards, for example (Franklin et al., 2012).

Mental health providers in the school must also be involved in all levels of support and some of this work may involve working with and/or supporting teachers. Since teachers provide services in the first tier, teachers may require education from mental health providers to learn more about mental health in general and/or about an intervention they will implement (Frauenholtz et al., 2017; Langley et al., 2010). In addition to the need for education, teachers may benefit from consultation services by mental health providers to assist them in intervention implementation (Berzin et al., 2011). Finally, mental health providers support teachers across tiers by helping them collect data relevant to interventions being implemented (Atkins et al., 2010).

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#### Foster Parent Involvement

When students receive special education services, parents are involved in the decision making process. However, scholars argue that involvement only at that level is inadequate and that mental health services can be enhanced by increasing overall parent involvement (Atkins et al., 2010). Although Atkins et al. (2010) focuses on the need for parents' involvement, I use this section to review findings about how teachers' can increase parent involvement.

Teachers and educators are responsible for contacting parents and arranging for participation in services. A review of the literature suggests that when teachers utilize certain strategies, parental involvement in school mental health can be enhanced. For example, if a school decides to start a small group for students coping with trauma, teachers may consider avoiding the word 'trauma' and opting for the word 'stress,' since parents, who consent for their children to participate, have expressed that the word 'trauma' evokes fears of social workers removing children from parents' care (Langley et al., 2013). Other research suggests that in each instance a parent needs reached, school personnel should thoughtfully select a school representative to contact the family. Further, parents have suggested that due to employment schedules, it can be difficult for them to be reached. These parents

articulated an interest in participation and requested teachers vary their methods for trying to contact parents (Langley et al., 2013). These findings suggest that educators should (1) use language that is clear reduces stigma, and emphasizes strengths and (2) consider important factors in determining whom, when, and how parents are contacted. However, little is known about teachers' perspectives regarding how they can enhance parental involvement in school mental health.

### *Statement of Purpose and Research Questions*

Research investigating teachers' knowledge and awareness of youth mental illness has revealed that teachers feel uncomfortable with their mental health knowledge. Scholars' efforts to assess teachers' mental health knowledge has provided mixed results (e.g. vignette findings versus knowledge and nomination findings). The literature would benefit from an enhanced understanding of teachers' knowledge of signs and symptoms of mental illness from a qualitative perspective, specifically as it relates to teachers' understanding of signs and symptoms of mental illness in their actual students. Research has also investigated whether interventions can enhance teachers' mental health knowledge and promote helping behaviors towards students who struggle with mental illness. However, few studies have incorporated teachers' perspectives on what they believe they can do to help students with mental illness.

This qualitative study seeks to understand classroom educators' perspectives on student mental health, specifically, depression, anxiety, and eating disorders. It aims to complement relevant quantitative studies leading to a more comprehensive and thorough understanding of teachers' and classroom based educators' knowledge

of the signs and symptoms. Further, it will investigate educators' perceptions about how they may help prevent student mental health difficulties and work with students with existing mental health challenges. This study has two main research aims and all questions will be addressed predominantly through a qualitative design utilizing thematic analysis.

- 1) What is classroom educators' understanding of the signs and symptoms of eating disorders, depression, and anxiety that they recognize from a vignette and from their own personal experience?
- 2) What do classroom educators think they can do to address mental health difficulties in the school setting?

## Chapter 3: Method

The current qualitative study was part of a larger mixed-methods, cross-sectional study utilizing a convenience sample to understand educators' perspectives on adolescent mental health, particularly as it is relevant in the school setting. The larger mixed-methods study examined 1) educators', parents', and students' knowledge regarding eating disorders, depression, and anxiety, 2) how they would or have helped students with similar mental health concerns, and 3) barriers that make help-seeking for SBMH services more difficult to obtain. This study looks exclusively at qualitative data gathered from teachers.

### Participants

Participants were recruited between July 2016 and March 2017. They were 27 secondary educators (Female = 59%, Male = 41%), of which 70% self-identified as White, 15% Black, 7% Asian, 4% Latinx, and 4% Biracial. Nineteen participants had their Master's degree and eight had completed a Bachelor's degree but not a Master's. To qualify for the study, participants were required to have at least one year of classroom experience ( $M = 4.83$  years) in a secondary school. Since there were not additional qualifications, participants had varying educational backgrounds and differing experiences and responsibilities in the classroom.

Educators represented a diverse range of classroom professionals. During the time of data collection, fourteen participants were currently serving in the United States as general education classroom teachers. Sixteen taught in public schools, ten taught in private schools, and one teacher's school-type was unknown. Most teaching

in a private school, were teaching in a Catholic school. Six participants were classroom teachers in the past two years but were no longer teaching due to retirement, doctoral education, and/or a change in career. Four teachers were special education teachers. Two participants were serving as teaching assistants through an AmeriCorps program. Another participant spent one-year in a United States classroom but was currently teaching English as a Foreign Language in France. Thirteen educators were known to have taught in a high-need area and be untraditionally trained since they were former AmeriCorps members. These participants either served for at least one year as a full-time classroom assistant or two years as a classroom teacher.

Participants were recruited through a variety of methods, which allowed for participants to be recruited from any region in the United States. Recruitment flyers for the study were posted to Facebook, emails were sent to relevant list serves, and fliers were hung in and around a major university's education building. Although it is not known where all participants taught, a substantial number worked in urban and/or high need environments such as in Title I schools. Seven participants currently or most recently taught grades 6-8, sixteen were teaching grades 9-12, one was teaching grades 6-12, one taught students K-12, one taught 7<sup>th</sup>-9<sup>th</sup> grade, and one taught 9<sup>th</sup>-11<sup>th</sup> grade.



## Measures

### Case Vignettes Depicting Mental Illness

Educators were presented two case vignettes depicting adolescent females struggling with symptoms consistent with mental illness. These vignettes have been used in previous research (Hart, 2010; Jorm et al., 2010) but characters' names were modified slightly for the purpose of this study. Linlin, one character in the vignette, was depicted as struggling with symptoms of bulimia (Hart, 2010), and Wenwen, the other character, was depicted as struggling with depression (Jorm et al., 2010; Yap, Reavley, & Jorm, 2012).

## Procedure

All interested educators who qualified for the study (educator based in a secondary classroom) were invited to participate. Data were collected between July 2016 and March 2017. After participants consented to the study, they completed a roughly 20-minute survey (Appendix A) either online or in person. The survey started by asking participants about demographic data and their years teaching. After collecting basic demographic data, the remainder of the survey examined educators' mental health literacy.

In the survey, educators were presented with the two case vignettes depicting adolescent females struggling with symptoms consistent with mental illness. After reading each vignette, participants were asked, "in your opinion, what is going on with [character]?" Participants were given a list of options and were instructed to check all that applied (see Appendix A). The survey then asked participants to

identify whether listed services and providers would be helpful, harmful, or neither to Linlin and/or Wenwen.

After participants completed the online survey, all participated in a 45-minute semi-structured interview with a trained graduate student (either myself or another graduate student) or a doctoral level psychologist either in person or over the phone. All interviews were audio-recorded. Interview questions (see Appendix B) were developed based on Jorm's theory of MHL (Jorm et al., 2010; Yap et al., 2012) and from Breland-Noble, Burriss, and Poole's (2010) work on treatment engagement. In general, questions were designed to ask about 1) teachers' knowledge regarding eating disorders, depression, and anxiety, 2) how they would or have helped students with similar concerns (eating disorders, depression, and anxiety), and 3) barriers that make help-seeking for SBMH services difficult to obtain for students. Further, interviewers also asked participants to follow-up and provide rationale for their answers to the questions asked in the survey. In sum, questions asked teachers about their experience, thoughts, and perceptions regarding youth with anxiety, depression, or an eating disorder. Upon completing the survey (administered either online or via paper/pencil) and the semi-structured interview, participants were compensated for their time in the form of a \$25 gift card.

### Data Analysis

All interviews were digitally recorded and transcribed verbatim. Identifiers from the transcripts (e.g. names of participants and schools) were removed. Cleaned transcripts were then uploaded onto the qualitative and mixed methods software program, NVivo 12 for analysis. The coding team comprised of two doctoral level

researchers (the PI and a post-doctoral fellow) and three doctoral level graduate students in school psychology (including myself). Data were analyzed using thematic analysis, a qualitative analytic method that involves identifying themes and patterns within qualitative data. Thematic analysis allows for considerable flexibility as it is not limited to any particular epistemological or theoretical perspective (Braun & Clarke, 2006). Previously, it has been successfully applied to data grounded in either epistemological or constructionist theories.

Qualitative data in this study were coded using Braun and Clarke's (2006) six step guide for applying thematic analysis. Therefore, this data analysis section is written in accordance with Braun and Clarke's (2006) six-step method. First, coders gained familiarity with the data, without actively coding the data for themes.

Interviews were conducted and transcribed by graduate students which helped familiarize and expose the coders to the data. The post-doctoral fellow leading the process read the transcripts in an 'active' way (e.g. memo/take notes on interesting text segments) and guided the graduate students to do the same.

Utilizing Braun and Clarke's (2006) six-step guide for applying thematic analysis, coders initially gained familiarity with the data without actively coding the data for themes. During this initial stage, the transcripts were read in an 'active' way. Early impressions were saved in memos and notes on interesting text segments. After establishing familiarity with the transcripts, the coding team generated initial sorting categories based on a priori process. A theoretical thematic analysis was conducted given that research questions were established in advance. Three overarching research questions informed the sorting framework:

- 1) What are the signs, symptoms, and causes of mental disorders identified by the participants?
- 2) What are helpful strategies or school-based resources that participants identify for students struggling with mental illness?
- 3) What are general or perceived barriers for students to seek mental health services in the school setting?

Principles of “open coding” (Strauss & Corbin, 1990) were used, meaning that codes were modified and developed during the coding process (i.e. no preset codes). The PI and post-doctoral fellow developed three coding categories and definitions (one category and corresponding definition for each research question): 1) defining and contributing factors of mental illness, 2) how to help students or prevent mental illness, and 3) barriers which impede help seeking. However, the present study answered only questions one and two.

To answer research question 1 (“What are teachers’ understanding of signs and symptoms of eating disorders, depression, and anxiety?”), an excel file was created listing all of the DSM-5 symptoms of eating disorders, depression, and anxiety. Two trained graduate students tallied the number of instances in which a participant identified a symptom of an eating disorder, depression, or anxiety that they observed in the vignette or in their personal experience. The coding team coded six transcripts and met to discuss agreement and consensus for the application of codes. As a result of high agreement, members of the coding team coded the remaining 21 transcripts.

To answer question two, the coding team applied the sorting categories to a sample transcript. Team members used a highlighting scheme to indicate parts of the transcript where participants discussed something corresponding to a rule. Afterwards, twenty percent of the interview transcripts (n= 5) were selected for all coders to code into one of the three categories (see above) using a highlighting color scheme. Initial agreement was calculated for the transcripts among all coding team members. Coders met to discuss areas of disagreement and reached at least 80% consensus. Final agreement for the sample five transcripts was 86.2%.

In line with the third step in Braun and Clarke's (2006) six-step guide, two members of the coding team (the postdoctoral fellow and I) labeled excerpts from three transcripts where participants listed helpful strategies to promote mental health, prevent mental health difficulties, and/or alleviate symptoms of mental illness. Discussions were held about the definitions of different codes and the relationships between codes to ensure that they captured the meaning of the segments. In the fourth stage, thematic maps were created to depict emerging relations among the data. During this process, a code book was developed based on an initial framework. The two coding team members continued to independently code transcripts and met regularly to refine coding rules. After ten transcripts were coded and discussed, the coding scheme was finalized to reflect participants' thoughts on what they can do to address student mental health needs. During this time, inter-rater reliability was calculated between the two coders. The kappa coefficient averaged between two random transcripts was .80 indicating substantial agreement (McHugh, 2012). As a result, I coded the remaining 15 transcripts independently. After the codes were

exported from NVivo 12, several codes did not reach the minimum twenty percent threshold to be established as a theme. The coding team met again and consolidated themes as appropriate. In the end, we were left with five themes and fifteen subthemes.

In accordance with the sixth and final stage of Braun & Clarke's (2006) guide, I wrote up the findings of the current study in a way that depicted the data in a coherent, succinct, and interesting manner. Exemplars of each theme are depicted in the results section.

## Chapter 4: Results

### Signs and Symptoms

Participants were presented with two vignettes; one depicted a student with an eating disorder and the other depicted a student with depression. After participants were presented each vignette, they were asked by the interviewer to describe the character's main problem and what was going on with the character. The interviewer also asked if they ever worked with a student or knew someone who experienced an eating disorder, depression or anxiety, and what made them think that person had the disorder.

#### Signs and Symptoms of Eating Disorders Acknowledged by Educators in the Eating Disorder Vignette

All participants successfully identified that Linlin, the character in the vignette, was experiencing an eating disorder. When asked why the teachers thought Linlin had an eating disorder, the top three most commonly mentioned symptoms from the vignette were Linlin's concern with her body image/her misperception of her weight (70% of participants), her bingeing behaviors (52%), and her purging behaviors (either through medication or vomiting; 52%). Only 19% of participants listed Linlin's below average weight, and 11% mentioned Linlin's fasting as reasons why they suspected she had an eating disorder.

## Signs and Symptoms of Eating Disorders Noticed by Educators in their Personal and Professional Experience

Eighty-five percent of participants mentioned that they either knew someone with an eating disorder diagnosis or knew someone they suspected had an eating disorder. The top four signs and symptoms of eating disorders that participants mentioned from their personal and professional life related to eating disorder were seeing a student/person 1) exhibit restrictive eating (48%), 2) below average weight or experience a significant and sudden change in weight (43%), 3) have a misperception of their weight/body image difficulties (43%), and 4) skip meals and fast (43%). Notably, no participants mentioned purging through medication, and only 22% mentioned purging through vomiting. Similarly, only 30% mentioned bingeing behaviors as a reason they suspected someone had an eating disorder.

While some educators discussed not having access to observe students' eating habits, others had unique vantage points into student eating patterns due to spending meals in the cafeteria or being involved with youths' sports teams, for example. One teacher recalled her student's verbalizations around restrictive eating like, "oh well this food has like more calories so I can't eat that." Some educators recalled friends from their personal life who struggled with an eating disorder and restricted their eating, "I remember my friends, you know they wouldn't eat certain things."

Participants recalled observing students significantly underweight, "I can think of one student I think is grossly underweight for her age." Teachers who worked with students over a period of time were able to notice significant weight loss/changes in weight. One teacher commented, "you know, and then dramatic weight loss, that was



also prevalent.” Participants talked about how students’ struggle with body image affected them in class. For example, one teacher said, “even when speaking in front of a class, you can just tell, like you know the outward image, more concerned with it.” Another teacher recalled a student that was passionate about body positivity work but still struggled with their body image,

Well there were some very intense emotions concerning the rights of women in this particular student which included body image and was really passionate about that but then when bringing it up in terms of class discussion and the realities, they would be visibly emotional or unwilling to share because they seemed to struggle with it.

Finally, teachers became aware of their students skipping meals because students avoided the lunchroom, spent time in the teacher’s classroom, and refused to eat during lunch. One teacher recalled, “kids come into my class at lunchtime, not eat.”

#### Signs and Symptoms of Depression Acknowledged by Educators in the Depression Vignette

Eighty-five percent of participant correctly identified depression from the vignette. The four most mentioned symptoms from the vignette were the character’s sleep difficulty (67%), loss of interest in activities with friends (withdrawal; 59%), loss of interest in piano (48%), and decrease in appetite (48%).

#### Signs and Symptoms of Depression Noticed by Educators in their Personal and Professional Experience

Ninety-three percent of participants mentioned that they either knew someone with diagnosed depression, or knew someone they suspected had depression. Among participants who knew someone with depression, the top four signs and symptoms that participants discussed were observing the person or hearing that the person 1)

had a depressed mood (64%), 2) was withdrawn (52%), 3) experienced sleep difficulty (48%), or had 4) impairment in school (48%). A sizeable percentage of participants (40%) also described seeing anhedonia in the people they suspected to be depressed. Notably, only 16% of participants described eating difficulty as a reason they suspected someone was experiencing depression.

When educators provided examples of people they suspected to be depressed, they often provided examples with students. Educators described students presenting with a depressed or as being irritable. One teacher described a student as a persistent “Debbie Downer” while another described the student’s pervasive irritable mood, “well sometimes there are those that have kind of a negative attitude and get angry and um you know you talk to them and they get very defensive.” Though teachers tended to describe observing a student’s depressed mood through their behaviors and affect, some teachers knew about the student’s depressed mood because the student disclosed it to the teacher or because their writing was exceptionally sad and dark. Though teachers were not able to objectively determine students’ sleep schedule, they often indicated behaviors observed in class that suggested the student was experiencing sleep difficulty. Many described students sleeping in class, laying their heads on their desks, or presenting as excessively tired/lethargic. Some teachers were aware that students were having difficulty getting out of bed in the morning. Many teachers used students’ school impairment as a sign to indicate that the student was depressed. Some educators observed inconsistencies in work completion, motivation, or a decline in grades. Others talked about persistent tardiness and/or truancy.

## Signs and Symptoms of Anxiety Noticed by Educators in their Personal and Professional Experience

Seventy-four percent of participants mentioned that they either knew someone with diagnosed anxiety or knew someone they suspected had anxiety. Among participants who knew someone with anxiety, the top three signs and symptoms participants discussed were 1) excessive anxiety/worry (55%), 2) restlessness/fatigue/concentration difficulty/irritability/muscle tension associated with worry (35%), 3) and school impairment associated with worry (35%).

When teachers reflected on behaviors they observed in people suspected to have anxiety, they often described students' pervasive worry and anxiety, often with regards to school. One teacher described students constantly "saying that they're worried...always asking like 10,000 questions when the first one was sufficient...verbalizing that they feel anxious or worried." Teachers who observed their students to be fatigued or restless, often witnessed students fidgeting or having difficulty concentrating. Finally, participants also noted that the students' anxiety often interfered with their schoolwork. Participants talked about observing signs such as excessive worry, or a lack of confidence, which was exhibited by their incessant questions, "aggressive answer switching," and avoiding challenges due to a fear of failure.

### Addressing Mental Health Needs

Interview questions focused on classroom educators' perspective about how mental health disorders can be prevented and addressed. Educators were presented with vignettes depicting students with mental health difficulties and were asked to reflect and share their experience working with students with mental health concerns. Teachers were also asked what they would do if the student in the vignette was their student. Five main themes emerged from the analysis: 1) within school collaboration, 2) student support, 3) family involvement/family-school partnership, 4) school reform/systematic change, and 5) teacher professional development training. Each main theme also had sub-themes materialize (15 total). This section will review each theme (see Table 1 for list of all themes), starting with the most common theme and finishing with the least common (as indicated by number of participants discussing each theme). Each sub-theme is reviewed in the major theme section in which that sub-theme is embedded. Percentages for each sub-theme indicate the percentage of participants who mentioned each sub-theme at least once during the interview (see Table 1). Additionally, themes and sub-theme was analyzed by the frequency in which participants of various characteristics (gender, age, experience, school type) mentioned each theme (see Table 2 for break down). Notable differences did not emerge based on participant characteristic so this is not discussed further.

#### Within School Collaboration

Every participant addressed the importance of collaborating with other school professionals to meet student mental health needs. Participants were most

likely to mention the importance of *school referrals* (100%) to facilitate students receiving assistance from professionals in the school that were more specialized in mental health or special education to triage and help the student. Ninety-three percent of participants also addressed the importance of *general within school collaboration*, noting existing systems where staff share resources, prevent mental health difficulties, and coordinate care for students already presenting with mental health concerns.

### **School Referrals**

All educators (100%) in the study expressed making referrals to school personnel (e.g., school counselors, school psychologists, school administrator, consulting psychiatrist based in the school, school social worker) since these personnel were identified as the most appropriate person to address concerns related to social-emotional health and/or mental health. For example, one teacher shared,

Because I feel like, at least from a teacher's perspective, there's um, in my opinion, there's um mental health and I mean anything related to the family or um needs or anything going on, even sometimes physically (yeah) and not necessarily just like mentally, it's the social worker, or it's the counselor (mhm). Like I feel like that's the realm that they deal with it (yeah), not me.

Some teachers used referrals to reduce peer difficulties, identify and triage mental health concerns, and/or provide the student with more specialized help. While many teachers reflected on previous referrals, some had never made a referral to another school provider, but stated that if they had a student presenting like the character in the vignette, they would make a referral to a school mental health provider. Some teachers stated that they would make the referral on behalf of the student and submit it directly to the provider, whereas others suggested they would encourage the student see the provider and would not necessarily submit a formal referral. Other times, they

opted to give the student a choice. For example,

Somebody has to go to the guidance counselor and say, “hey, I’m concerned about this kid. This is what I’ve seen.” Um again and say to the child, “I’ll go with you if you like or you can go on your own but this is not something that we’re gonna ignore. Um I’m concerned about you, I’ve seen, I’ve seen you change over time.”

Taken together, all classroom educators are aware of the importance of making referrals to school based mental health providers when they work with students with mental health difficulties. They varied, however, in their referral method (e.g., direct referral to provider vs. referring student to provider), reason for making a referral (e.g., to provide treatment, to gather information), and who the referral was made to (e.g., school counselor, school psychologist, administrator).

### **General Within School Collaboration**

Almost all participants (93%) emphasized the importance of within school collaboration. Some teachers described collaboration as a mechanism to alert other school providers to student mental health concerns; others mentioned that collaboration helps identify classroom interventions and coordinate their delivery of interventions across classrooms. Some teachers described having formal collaboration structures whereas others collaborate on an informal, as-needed basis. Some structures were elaborate and well-established like this participant’s Compass team:

So we have what’s called a Compass team... it’s comprised of our, we have a psychologist at school, who is like our um counselor, psychologist... Um we have um a team of school nurses um primarily one but we have a couple other that ya know substitute in so it’s a consistent thing um we have a English-la learning specialist, um a academic specialist, a math specialist, and a um couple different support uh resources at like the primary middle school and high school. Um and they form kind of a team that works to support the students kind of across the board. So, cause the specialists are working, you have some ties between academics and um more of a social-emotional disorder um or some anxiety that then causes their academics or vice versa. Um and so they meet on a regular basis um to strategy plan and then also, we have um strategy meetings as a um so in, for me for the high school division, but we have strategy meetings at every kind of division level, whether it’s elementary, middle or high school, um once a month or so um to kind of discuss certain students that are on our radar um and as well as being

communication um so if a student has something that's going on we'll get email notification or have a special meeting specifically if you teach that student, to be informed about what we can do with them. So it's kind of this like constant flux of communication in and out.

Participants sometimes stated that school mental health providers coordinate with teachers to lead classroom mental health interventions. Other times, educators and school mental health providers collaboratively promote mental health. Sometimes the collaboration involves the school mental health provider offering training to teachers so they can address concerns they have about a particular student. For example, one teacher provided an example of coordinating an intervention in coordination with the school counselor and other providers,

Basically through an assessment with the school counselor, and their parent, and their own personal therapy, if they had anxiety attack or panic attack, they were asked to identify a teacher in each building or a teacher who you would want to go to or who would need to be there to assist you, and I was that, he chose me, and I said "okay!"

#### Student Support

All participants (100%) talked about addressing school-mental health concerns by directly supporting students. Sometimes teachers discussed providing interventions or accommodations to specific students with already known concerns, while other times they discussed efforts that could prevent or reduce the risk of students developing mental health concerns. Educators discussed the importance of *educating students about mental health literacy* (93%), providing *emotional support* (88%), *monitoring and information gathering* (81%), allowing *classroom accommodations* (67%), *encouraging help-seeking* (63%), *problem solving* (44%), and *involving students in fun and meaningful activities* (41%).

#### **Educating Students About Mental Health Literacy**

Nearly every participant (93%) highlighted student education in preventing or addressing mental health difficulties. Most educators discussed the importance of teaching students specifically about mental health (44%). When educators talked about messages they wanted their students to receive, they emphasized the importance of teaching students the signs and symptoms of mental illness as well as information that could lead to a reduction in stigma, and a greater normalization of mental health concerns. For example, one teacher talked about the mechanisms through which she could provide education, and wanted students to gain from the lesson,

Um I think just like teaching kids about mental illness, and also, um if you're gonna go from like the PBIS lens, the um, what did we do in our, in the elementary thing we did "what is mental health?" We did a lesson on mental health and like what that means, and we basically said it means like how you feel about yourself... There were like three parts to it. But it was like teaching the kids, like mental health is not just like a crazy person, like that's not what it means. It means like, you're taking care of yourself and you feel good about yourself. You have good self-esteem and you have good relationships with other people, and you treat them well, and they treat you well. And that kind of thing, um, and just getting them thinking about it, so they're not like getting to the point where they're older and having severe anxiety and not knowing what it is.

Other teachers thought lessons would be most effective if students were educated through case examples or guest lectures by people who have experienced mental illness. This teacher said,

Um I do think that ya know, testimonials, if you have someone on your faculty or um around who has struggled with something similar to be able to say that, that it's okay, um ... if a teacher has an issue um is almost more helpful because it gives an outlet to start a discussion and um to say, here's some research, here's ya know in phys. ed. Here we're gonna talk about mental health and ya know here are the statistics and here's um, I don't think that's the way to go about it. I think in a more like real way this stuff is presented, it's gonna be what's gonna make students ultimately feel more comfortable talking about it amongst themselves and understanding that it is a part of life



and sometimes it happens to you or people you know. Um and being able to like navigate that as a teenager.

One teacher discussed educating students on the signs and symptoms as an effort to equip students with the knowledge to help friends, but also to instill hope and to normalize the experience of help-seeking.

I think this would be a matter of, everything I mentioned applies. So the education component—making students aware and teaching them, what are some signs? What are some symptoms? What are some things to look out for for this to be a caring community for our friends? Having real people come in who look like them and act like them and are successful in their eyes and be like, “yeah I’ve struggled with this. Yeah this is what I did. This is my experience.” Like talking openly about it

Other educators talked about the importance of teaching students about

healthy lifestyle practices (63%). Most of these discussions focused around healthy eating and exercise. One teacher talked about how education on promoting a healthy lifestyle could be started early,

I think that it just goes really back to the early on education. Like you can start early on to incorporate healthy eating habits, healthy "dieting," I don't like the word dieting but controlling like the curriculum so you're teaching kids from an early age how to like respect their body, enjoy their body. What foods are nourishing for their bodies what foods are not. It doesn't need to be an extreme of like this is bulimia this is what it looks like to binge eat and all that stuff, it can just be like okay you're in kindergarten this is your first day wow, and like carrots do this for your body, this does that for your body, and then you know second grade, we're exercising cuz we want to stay healthy, here are some fun exercises. And I think after a while you gotta keep building on that keep encouraging kids.

Some participants (30%) mentioned their role in providing body image education, more specifically. These teachers saw themselves as taking on some of the responsibility in challenging societal pressures for young adults to act or look a certain way. One teacher said,

Just education. Early education about just mindset behaviors like what it means to be positive, feel positive, be healthy versus be attractive or popular

in terms of society, more education about kind of about sociology instruction, kind of, honestly. Saying “this is a construct, not reality” and developmentally appropriate lessons that kind of explain that this is what society thinks but it is not true. There are so many other ideas of beauty in the world.

One teacher discussed the overlap between healthy lifestyle practices and body image education,

“Um, I think in a school setting, education on like ya know what, what is healthy, what is um what your body needs, what is a good weight to be at um for your height, what’s like the healthy range as well as um really kind of invoking self-confidence, not just in how you look but also what, ya know, what your accomplishments are, what your talents are.”

In addition, there were a sizable number of participants (22%) who talked about educating students with the intent of changing their thoughts about the situation. Most of these conversations centered around changing maladaptive body image cognitions.

In an effort to prevent or reduce mental health difficulties, some educators (26%) talked about teaching students coping and stress management techniques as well as practical resources (22%) to use if experiencing mental health difficulties. For example, one teacher said,

I think part of that general education kind of needs to be you know teaching students and people how to manage their own stressors in life. And what are some effective ways of doing that and what are some nonproductive ways. I mean we have some very defiant middle school boys, and it sometimes is like well you need to be able to manage your stress productively and healthily, not taking out anger to go punch somebody, you know so I think some of it ties together just how to deal with these issues that you face in your daily life. And how to recognize that you know they're not global, they might be today but that doesn't mean it'll be tomorrow too and things like that.

### **Emotional Support**

Most educators (89%) said they provide some type of emotional support to either prevent mental health difficulties or to ease the burden on students

experiencing difficulties. Many emphasized building relationships with students (63%) and believed that through these efforts, students would be more inclined to trust teachers, seek support from them, and disclose mental health difficulties. One teacher said,

As far as me getting to know all of my students, what their interests are, who form positive relationships, to talk to them about what their interests are as a person, and get to know them as a person and not just as somebody I'm trying to teach science to. So I think that general approach allows students to become more open and honest to teachers and I've had students open up to me about a lot of things that I think I've established the rapport as a teacher to... get the student to talk about their depression... while I don't think that I can prevent depression, I think um, the forming positive um relationships with the students, um, would open up the student to talk to the teacher at a sooner point in the process that would help treat the depression sooner and more efficiently and quickly.

Another teacher shared similar sentiments,

Always letting your students know, like no matter what the issue, like not even just mental illness, "I'm always here to talk to you. I am a resource for you all." I just think that's really important from like the get go because if they're comfortable talking to you, you can find the resources for them.

In addition to building relationships with students, educators (60%) shared that it is imperative they are sensitive and nonjudgmental when working with students on issues pertaining to mental health. While many teachers emphasized the importance of sensitivity, they varied in discussing how they would be sensitive to the needs of their students. Some talked about being nonjudgmental when addressing a student displaying concerning behaviors (e.g., rather than providing judgment when talking with the student, be sensitive, point to specific behaviors, use I messages, and refrain from making judgments about why the student is engaging in the behavior). Other teachers talked about being sensitive to the student by giving them as much autonomy as possible in determining the next course of action (e.g., giving the student

autonomy in whether they wanted to alert their parents about self-harm behaviors or whether they would prefer school staff alert the parent). Some talked about instilling students with hope, while also recognizing how difficult it is for them to talk about these difficulties,

And, maybe I should also consult other colleagues, because this can be a really sensitive issue for her. So making sure that I sort of keep confidentiality, be sensitive to her, to her needs, and sort of see what the process, what she wants it look like for her.

A couple of teachers mentioned the importance of being culturally sensitive, and talked about refraining from stereotyping while also being aware of how discrimination and stereotypes affect students. As an extension off of being sensitive to students with mental health concerns, teachers (60%) also talked about their role in normalizing mental illness and mental health difficulties. Some teachers talked about normalizing mental health concerns as it relates to prevention,

Like real people, making it as real, starting to normalize it as this is a problem that affects a lot of people and we can't be scared of it and we can't be like "ooo it's some taboo." It really needs to be like, "oh we are just looking out for each other and we all have areas that we fall down and we have issues and we need to work together to overcome them." So having things with kids that are real scenarios, real kids, that may look super sporty, you know, the image is not all that's going on. So any kind of engagement you can have with real people is great.

Other teachers talked about normalizing challenges,

just encourage them, I tell them you're young, a lot of things are going on so maybe you cannot deal with it right now so it's okay, everybody's going through this or that you're not the only one you know. And also don't be too harsh on yourself, you're just a normal human being you know, normal human being. Emotionally sometimes they're like they feel high sometimes they feel low everybody goes through that. So when you feel like it's too much just talk to a professional, seek professional help.

and removing stigma,

Um, like I said, breaking down that stigma so I think the earlier the better in showing students that these are mental disorders and it's okay if you or someone you know as them and they can get help and it doesn't mean, I think it's really important to stress that mental disorders is not, it doesn't need to be something that defines you and that you're not crazy.

Finally, some teachers (30%) talked about emotional support such as encouraging a positive attitude and/or providing students with a space where they feel safe and comfortable talking about mental health difficulties (30%). Teachers talked about identifying students' strengths and then encouraging them to recognize their strengths. They also talked about promoting a growth mindset and encouraging self-compassion as mechanisms through which to promote positive attitudes.

### **Monitoring and Information Gathering**

The majority of educators (81%) talked about their role in gathering information about new student mental health concerns as well as monitoring mental health symptoms related to concerns already known to school staff. Some teachers stated that by gathering more information, they will be better able to determine who to seek help from or where to direct a student. For example, one teacher said,

Umm, I've also I think when students are more withdrawn they're going to the cafeteria and you have to figure out why they're not going to the cafeteria. Is it because they're trying to avoid the food, or are they trying to avoid social situation. You have to ask about what's going on. So sometimes, it's a little subtle so you just have to keep probing.

Some teachers talked about looking for overt changes in behavior while others recognized that some changes may be subtle,

Um so also being aware and being able to pick up on the, those little negative comments that I mentioned earlier that students make about themselves. And um when those start, whether it's about their, their progress in the class academically or their physical appearance, being able to feel comfortable to either relay that information to someone else, that you are in need of support,

or pull that student aside to have, if you have that rapport, to have a conversation about like what is going on.

### **Classroom Accommodations**

In an effort to reduce mental health difficulties or to help alleviate some of the difficulties associated with mental health, teachers (67%) talked about implementing practices or policies in the classroom that could help meet students' mental health needs. Forty-eight percent of the teachers (n= 13) shared that they have or would consider modifying the classroom or instructional setting. Teachers discussed strategies such as allowing students with mental health difficulties extra time on assignments, allotting time for students to participate in activities they enjoy, or tweaking lessons in an effort to reduce outbursts. One teacher talked about making these adaptations with the student,

just connecting with the students, saying “okay well what would make you feel more comfortable? Um, ya know, if you're really freaking out about something, what's gonna make you feel more comfortable with this? Is it taking the test outside of the classroom, is it um ya know getting to proofread things outside the class because you're really anxious that you've made mistakes. Um is it ya know participation, maybe you just write questions and you email them to me during class instead of um, or email me responses during class or write them on a piece of paper and turn that in instead of having to talk in front of everybody?” Um so kind of just building that partnership with the students and with other teachers and not, not like trying, I, I've been like, I've never wanted to like just like pretend it's not there. I've just been very upfront with students about what, I want to do what's best for you, so let's try to figure out what that is. Um and building that kind of relationship and partnership with them in the very beginning.

Another teacher talked about preserving time in class to lead all students through meditation exercises,

And I kind of scaffolded it up where um we kind of talked about like okay how am I gonna sit in my seat, so like both feet on the floor, back up against you know the back, hands on my knees, or I'm gonna take five deep breaths and we're gonna, you know the first week we might just work on that, then the

next week on what a deep breath is, expand the diaphragm, hold for 5 seconds, oxygenate the brain and blood. And watch how your uh heartbeat is falling and okay now we've centered ourselves, now let's do a meditative exercise here. So I taught at a Catholic school so I led an exercise in the structure of the Ignatian examen, which um is kind of a contemplative way to look at someone's day. Um so I encouraged them to, walked them through an exercise, I mixed it up a bit but one I used a fair amount was I encouraged them to envision every moment in their minds, like put themselves in the moment from waking up to walking in my door.

In addition to modifying the classroom structure or lessons, teachers (26%) also talked about policies in which they allowed students to visit school mental health providers when a need emerged. Some teachers afforded this opportunity to all students all the time while other teachers had formal policies, and restricted the opportunity to students with Individualized Education Plans or known mental health concerns,

And I've had another student like that before too um, she had anxiety and it was known by counseling so they actually told all her teachers about it so she had a pass. So, if she felt like she had a lot of anxiety, she could just use the bathroom for a bit or go see counseling.

### **Encourage Help-Seeking**

Sixty-seven percent of educators mentioned encouraging students to seek mental health related help. A couple of educators highlighted discomfort students may face when talking with a school mental health provider, and they discussed ways they have attempted to mitigate this barrier. Some of their approaches include visiting the provider with the student, demystifying counseling, and normalizing counseling.

For example, one teacher provided an example from her personal experience,

for me it was kind of just simple, it wasn't just simple for me to bring her because she didn't necessarily feel comfortable going to the school counselor umm because it was like an issue with people in the school and she wasn't sure what was going to happen so I kind of had to like coach her through that counseling is kind of confidential and that kind of thing. Um, but it was like

kind of hard to get her in there initially and then once we were in there, she told me that she was like, that she was uncomfortable talking to like males, and she had to see a male counselor so it was kind of an awkward dynamic because she was like talking through me and I was talking to him but she, she, I mean, she talked to him and we got it some of the way figured out and then they kind of took it from there. Like, once they were at a comfortable level to both be able to talk to each other without me there.

While most educators discussed encouraging help-seeking in the context of school-based supports, a couple talked about encouraging students to also seek supports outside of school, or to engage in self-help strategies that could be effective in reducing their symptoms.

### **Problem Solving**

Nearly half of participants (44%) talked about engaging in problem solving behaviors with students. Educators' purpose for problem solving varied. Some talked about utilizing problem-solving to address an immediate student concern. For example, one teacher provided an example of their in-the-moment problem solving, "Like oh you're freaking out great tell me about it, let's figure out how to do what you need to do."

### **Involve Student in Engaging and Meaningful Activity**

Some educators (40%) emphasized allocating time to allow students to engage in a fun and meaningful activity so that it could help alleviate or prevent mental health difficulties. Some talked about the intent being to build students' confidence up. For example, one teacher said,

I think in teachers to help find things that the students are really good at and give them opportunities to show that, to show them they are um, they are very good students and they are very nice and so I think that's where maybe a teacher can come in, maybe find subjects specifically or activities that that student is good at and give them some of that, help them build some of that confidence up so that seems to be a confidence issue.



## Family Involvement/Family-School Partnership

Nearly all participants (89%) emphasized the important role of engaging students' families when addressing mental health issues. Teachers predominantly emphasized their role in *contacting families* as well as *referring students' families to community resources*. However, they also talked about the importance of partnering with families for other reasons such as to encourage mental health promotion efforts. One teacher said,

Maybe having some after school workshops for parents, uh also just having good relationships with the parents I mean just generally. Like in our school also we have a food market so doing things like that to show that the school can support them and be there for them. And also sending home letters talking about you know different issues.

### **Family Contact**

Classroom educators (81%) discussed about the importance of connecting with parents through email, phone, or in-person meetings. Teachers highlighted the value of building strong relationships with parents, and noted that establishing these relationships early can increase collaboration when a student is experiencing mental health difficulties. One teacher said,

I would be the teacher to call home any chance I get about anything just because you want to create that relationship where you know, you never know about anybody. You shouldn't just wait until the kid does something bad to call home, like always calling home so you have that communication so if something goes wrong at least you can call someone outside the school who knows the child and sees them on a regular, and can have some influence.

In other instances, educators stated their purpose for contacting a family was to notify the family about concerning behaviors and/or symptoms they observed. One participant reflected on instances in which she called home,

I feel like if I'm going to write a referral for something like depression, I would call the parents and just be like, "hey, I wrote this referral for these reasons, is this something you're seeing at home? Um, you know, if not then something's going on at school that we should cooperate on and you know figure out but you know if you are, maybe you know you can follow up with the counselor and seek outside support if necessary and just maybe like a little more aware of it.

Some teachers mentioned having recommendations or wishing to collaborate with parents by having a school intervention reinforced at home (or vice versa). Other times, teachers contacted family members to provide updates on school treatment, and/or reaffirm families about mental health efforts occurring in the school. A couple of teachers noted the importance of ensuring that educators who reach out to the parents are mindful of the family's cultural background,

So Wenwen, it sounds like, she might be, I'm not sure what her racial background is or cultural background is, but that would also need to be really understood. So that when you're providing information on depression, you're culturally sensitive. You're culturally relevant. Um and then sort of provide resources to the parents and to her that there are things that can be done to help her, and this would need to be sort of, have an ongoing discussion, and that would be sort of in the perfect world.

While 81% of the participants talked about contacting families, educators varied in how and under what circumstances they would contact parents. Some educators expressed concern with calling home regarding student mental health concerns because they felt it was out of their professional purview. Other educators stated that contacting and collaborating with families is paramount in addressing mental health difficulties and is one of the first steps they have or would take when working with a student with a mental health concern.

### **Community Referrals**

While teachers overwhelmingly mentioned the importance of utilizing school-based mental health resources, seventy-five percent also discussed a need to refer the student or student's family to community-based mental health care. Teachers mentioned recommending providers such as psychiatrists for medication, community-based therapists and suicide prevention hotlines. One teacher explained that if they encountered a student displaying symptoms similar to the one depicted in the vignette, they would encourage the family to visit the student's primary care physician to rule out physical health problems. While a few teachers expressed apprehension about making a direct referral to a community provider, one teacher believed a primary care physician was an appropriate recommendation. He said,

I think a doctor would be helpful and sort of a safe recommendation. A lot of my choices in this category were sort of what would help the kid even a tiny bit maybe, and what would not put me or the school at risk in terms of liability. And so saying to someone, you should ask your doctor about that, there's never there's no way to go back and maybe it would help maybe it wouldn't but it's not gonna be harmful and no one can say to you like how dare you recommend someone talk to a doctor?

A teacher at a private co-ed boarding school described the difference in making referrals for day students versus boarders,

Well, I think, I think we would, no I think it would be similar, because well if it was a day student we'd probably be asking the parents to do more because we'd say hey, we need you guys to take her to a doctor because you probably already have a doctor, something like that. If it's a boarder, and she lives far away, we're sitting there asking the parents hey we need you to let us take your kid to the doctor or the hospital or something like that. We can do the work, we need to do it for you.

#### School Reform/Systematic Change

Eighty-two percent of participants described being in favor of large scale and/or school-wide efforts to promote youth mental health. Some teachers talked

about integrating school mental health initiatives with the school's Positive Behavior Intervention Support (PBIS). Another teacher talked about a school club that led initiatives to promote body positivity. She said, "at the high school I worked at, we had a club called the Body Love club." Teachers' comments around school reform/systematic changes were mostly related to advocating for the *incorporation of mental health education into the curriculum* (60%), *enhancement of school climate* (48%), or *alteration of school procedures* (30%).

### **Incorporating Mental Health into the Curriculum**

Teachers advocated for large-scale system change and talked about the importance of integrating mental health information across the curriculum. One teacher said,

I would collaborate with different teachers and subjects so I would talk about in P.E. and health, "what it's like to exercise regularly, be healthy, what does that mean? What is the difference of being healthy and being a blah?" So in biology, talking about the biology of it in terms of sugars and fats and that could bring a lesson of how that works. Um, math, give them the statistics of it.

An English Language Arts teacher discussed the incorporation of books on body image into the curriculum, "like I said before, like how I said seeing yourself represented... or like reading books or stories if you're able to that are like, promoting different kinds of bodies and promoting different kinds of cultures."

Another teacher suggested expanding readings into a class-wide experience,

But I think especially in humanities classes, think about what literature your students need to read in your classes, um what, what are you choosing as topics for debate. What are you choosing as um videos to show and how can you incorporate those pieces of information um and those issues into your classroom and your class discussion as, yes we're teaching students like a feel of, maybe writing a paper, writing a book report, but what, what, what are they writing about? What do they wanna know about? What are they

researching? Um and taking then, getting that conversation started naturally in the classroom based off of the perspective that they see, that they don't necessarily have to come up with it and measure it on their own.

### **Enhancing School Climate**

Nearly fifty percent (48%) of educators highlighted the importance of improving school climate so that the school promotes positive mental health and serves as a supportive place for those with mental health needs. Educators had various ideas for mechanisms through which to improve the school's climate (e.g., collaborative efforts between teachers and school mental health providers, educators participating in school-wide climate improvement efforts such as hanging posters or providing self-affirmation interventions). One teacher talked about the importance of involving teachers in school-wide promotions focusing on amnesty from prosecution,

And it was, I, I remember taping up the posters all over the building as part of my job...And the posters just basically said, ya know that um, here's a way to report it without getting that person in trouble. Like it wasn't about discipline. If you smelled weed on your friend, this wasn't about calling the cops and getting them prosecuted, this was about getting them screened, getting them help.

Another teacher talked about the impact school climate improvements can have on getting youth services,

But I think it's also, requires strong systems of support and a strong culture at the school and at the family level in general. The stronger a school culture has, um, the stronger a culture the school has, rather, um the more that people in the school are going to be aware of the situation, the more capable they are of recognizing problems, and sharing information just like there's, perhaps there's a system set up in place but perhaps just teachers, teachers see the students regularly and they communicate information about them. They know them personally, intimately, they're gonna be more capable of picking up uh the minor details that are going wrong.

### **Procedural Aspects**

Some educators reflected on their past experience advocating for procedural changes to enhance school mental health care, while others talked about the potential impact of procedural changes. For example, one teacher said,

Also with ED, yeah we have an open door policy for our students to go speak to a counselor, but sometimes I feel like we can make more of an impact if it's actually on a student's IEP. Um, I don't know, that's something I've been fighting with. My school never wants to put counselor's names on IEPs and they look at me like I'm insane, because it'd just make more work and I know that but at the same time, I feel like it's more likely to get done if it's on an IEP.

Another discussed using the school's existing procedures to support students' mental health needs,

But right, taking behavior as a need to be met and so um, I would write those referrals to avoid detention, to avoid all of these other punitive things that I don't think are ever going to fix the real problem and I did find that it worked okay in my first school but at my second school, they had a lot more mental health supports. We had, so it's called the NAME center, this school was called NAME NAME and it was staffed with mental health specialists, psychologists, that were outside of the school so we had the school ones but we also had this whole like system for students who needed ongoing support but didn't qualify for an IEP because that's something that's interesting, social workers are more willing, I feel like sometimes to work with, especially the students with IEPs that have a social worker as their case manager or something like that or even regardless if the problem is a social worker problem and so what I liked about that school was that it had a lot more support for kids who wouldn't necessarily qualify under any other situation. So I would write those all the time before, like an office referral.

Taken together, educators talked about the role they have in advocating for or utilizing school principles that meet the mental health needs of its students.

#### Teacher Professional Development Training

Many educators (60%) expressed the importance of knowledge and professional development trainings. Fifty-six percent of participants highlighted the value of, or a desire for an *increased awareness of youth mental health needs* (e.g.,

symptom, risk factors). Other participants (less than 20%) mentioned that professional development efforts should provide information on cultural sensitivity as it applies to mental illness and that they should educate teachers about the appropriate procedures/legislation around addressing mental health concerns. One participant stated,

And then also you know, I think it's important for teachers and counselors to know what the uh laws are in terms of what they can say, and how they say it, and what the process is. So our students are identified as a student with eating disorder, what the proper reporting procedures are.

### **Increased Awareness of Mental Health**

Participants expressed a desire to know more about mental health such as information about symptoms, prevalence rates, and what they can do to help students presenting with concerning symptoms. One teacher shared,

that starts with our being educated and like having you know we have... teachers have so many professional developments, that school administration pays for and like provides access to teachers. And so it just takes one like once a month from the school counselors for here like here's the stats of what's going on with our students and how they feel about this thing and here's what you can do as the teacher as you see students going through things and the issues. Like it doesn't take that long so that's the first step and then see where it goes.

Another described feeling helpless during a mental health crisis and wanted mental health trainings that prepare teachers to deal with crises,

One of them is it would be really helpful to know maybe not everyone was created equal but if a kid is in the throws of say an anxiety attack, what do you do and not do in the moment? Like once they've gotten into that mode, how do you de-escalate? What is helpful to do and what is not helpful to do, like I have no clue. And kind of going along with that, what are some of the triggers that we'd like to either avoid or at least be aware of. So kind of saying okay this is gonna happen, these are the things that happen that may like set this person on the path to having an episode where she is being controlled by her anxiety to the point that she can't do whatever she's supposed to do. So kind of

more of a heads up so it doesn't kind of come out of the blue. I remember like we had a kid who was on the bike trip and who apparently suffered from severe anxiety and the next thing you know we're like in a campsite and she is having a full-blown anxiety attack in front of all the other kids, and I'm sitting there going we did not want to get to this moment you know? So figuring out like how if at all possible to avoid getting to that moment as much as possible.

In sum, 55% of participants discussed needing professional development centering around mental health awareness and knowledge, and a smaller number of participants (18%) also wanted professional developments to cover additional topics such as multiculturalism as it relates to mental health.



## Chapter 5: Discussion

Schools represent the most common place for youth with mental health needs to receive services (Lyon et al., 2013) and teachers are most likely to be the ones referring them (Dever et al., 2015). Research into teachers' role in school mental health has examined teachers' mental health knowledge as well as their role in implementing mental health interventions; considerably less scholarship has been devoted to recognizing and understanding classroom educators' full involvement across school mental health service provision. To my knowledge, no research has investigated teachers' perspective on how to address student mental health needs as well as how to prevent mental health problems among youth. Participants in this study were all educators who completed a pre-interview survey followed by a semi-structured interview. The purposes of this study were to 1) identify educators' understanding of the signs and symptoms of eating disorders, depression, and anxiety and 2) explore what educators think they can do to address mental health difficulties among students in the school setting.

### *Educators' Understanding of the Signs and Symptoms of Mental Illness*

To examine educators' knowledge of eating disorders and depression, participants were presented with two vignettes, one depicting an adolescent with an eating disorder and another depicting an adolescent with depression. All participants successfully recognized that the character in the vignette was experiencing an eating disorder and 85% correctly identified that the student in the second vignette was experiencing depression. During the interview, the majority of participants shared that they knew somebody (e.g., a student, family member, or roommate) they suspected

had an eating disorder, depression, or anxiety. It is not surprising that nearly all teachers knew somebody with depression or anxiety since prevalence studies identify youth incidence rates for both depression and anxiety to be as high as 30% in the United States (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Mental Health First Aid, 2019). Eating disorders are substantially less common with prevalence rates of 3% for youth between 13 and 17 (Merikangas et al., 2010; Mental Health First Aid, 2019). Given the relative rarity of eating disorders, it was somewhat surprising that nearly 85% of participants knew somebody who had experienced an eating disorder.

When participants listed reasons for suspecting someone was experiencing an eating disorder, they most frequently commented on an individual's struggle with body image/body dysmorphia. Other symptoms commonly identified were fasting behaviors, bingeing, purging, restrictive eating, and below average weight/weight loss. While teachers tended to correctly acknowledge signs and symptoms of eating disorders, they often expressed hesitation with whether the symptoms they observed or heard about were indicative of clinical concerns. Since little is known about teachers' role in preventing and addressing eating disorders (Piran, 2004), the present study provides initial information about teachers' knowledge of eating disorders. This study suggests that teachers are aware of the signs and symptoms of eating disorders but struggle to identify whether the symptoms are of clinical significance. Therefore, trainings focused on eating disorders, body weight, and shapeism may prepare teachers with the tools and knowledge to address concerns related to eating disorders features and symptoms (Piran, 2004).

When indicating signs and symptoms of depression, participants were most likely to list an individual's sleep difficulty and withdrawal as reasons why they suspected the person had depression, regardless of whether they were discussing the vignette or personal life experiences. Other signs and symptoms of depression that seemed more prominent to participants included school impairment, anhedonia, and/or pervasive depressed mood.

Despite the majority of participants knowing someone with depression, findings from this study suggest that teachers may not have a complete understanding of depressive symptoms. Only 22% of all participants noted a student's irritable mood and less than 50% listed withdrawal as a reason they suspected a child might be depressed. This is noteworthy since irritability and withdrawal tend to be common features of depression in youth (American Psychiatric Association, 2013). These findings suggest that teachers may not be aware that features such as irritability and/or withdrawal can be indicative of depression, although they view sadness, anhedonia, and school impairment as signs of depression. If teachers do not recognize irritability and/or withdrawal as characteristic of depression, they may not refer students exhibiting these symptoms to the appropriate mental health provider in the school. Additionally, if a student with depression is irritable, teachers may misclassify this as a behavioral problem and implement disciplinary procedures instead of referring the student for school based mental health services. This could have iatrogenic effects if a teacher attempts to rectify irritability or temper outbursts through punitive means as opposed to through mental health referrals. Notably, most teachers discussed a need for more training in mental health, and some were involved

with systems-level efforts to divert behavior problems from disciplinary referrals to mental health referrals.

### *Educators' Role in Addressing Student Mental Health*

Five main themes emerged from the analysis about teachers' perspective on how they can address student mental health needs in the school context. All teachers emphasized the importance of school collaboration (e.g., school referrals or team meetings amongst providers) and highlighted their role in supporting students as a mechanism for preventing and mitigating mental health concerns. Teachers talked about directly supporting the student with mental health difficulties, as well as indirectly through making referrals or collaborating with others (e.g., other school based mental health providers and parents). When teachers discussed directly supporting students, they provided various types of support (e.g., education/lessons about mental health issues, emotional support such as nonjudgmental listening, and/or monitoring or triage to determine a youth's functioning). Teachers frequently stressed their part in involving families or creating partnerships between the family and school. Some teachers used this partnership to recommend community-based mental health services, while others advocated for partnering with families in an effort to ensure interventions could be implemented in school and at home. The majority of participants stated that they share a part in changing the school system so that it can better address student mental health needs. For example, one teacher frequently wrote mental health referrals for behavioral difficulties and rarely wrote disciplinary referrals. Teachers described this kind of behavior as leading to a shift in the school's climate which could improve mental health services for students. Finally, teachers

advocated for participation in professional development trainings or efforts, which they believed could help them in addressing student mental health needs more directly.

Educators in this study recognized a need for professional development to improve teachers' knowledge of the signs and symptoms of mental illness. Typically, teacher training research has focused on increasing teacher mental health knowledge, improving attitudes towards mental health concerns (e.g., improving empathy), decreasing mental health stigma, and/or improving teachers' confidence in helping students with mental health concerns (Davidson & Range, 1999; Kutcher et al., 2013). Overall, these studies suggest trainings are effective in improving knowledge and attitudes (e.g., the constructs mentioned above) to a certain extent, though they are often critiqued for being too narrow. A couple of studies have assessed the effect teacher training has on teacher behavior in assessing and referring students with mental health concerns, and these findings have been less encouraging. One study found that after completing a specialized training, teachers were no better at recognizing students with internalizing problems (Cunningham & Suldo, 2014). Another study evaluated the indirect impact teacher training has on students, finding that teachers' mental health literacy gains did not trickle down and improve students' mental health knowledge or decrease student stigma pertaining to mental illness (Kutcher et al., 2013). This suggests that professional development efforts must, at minimum, move beyond solely educating teachers about the signs and symptoms of mental illness.

Teachers' desire for more comprehensive training is consistent with Jorm's framework of mental health literacy (MHL), which includes "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 (Kutcher et al., 2016)." In this study, for example, teachers asked for more comprehensive training regarding their mental health literacy, for example, training on their legal responsibilities as well as how they can be culturally sensitive (e.g., understanding the ways in which a student's culture may impact the student's mental health). Further, they called for training to equip them with the skills to appropriately intervene and address student mental health concerns. An example of such a training is Youth Mental Health First Aid, which is an evidence-based training that over one million Americans have received. Finally, teachers believed professional development efforts would be most appropriate if school counselors (e.g., harnessing the utilization of existing resources) presented on mental health concerns unique to the specific school. For example, students in middle school may have different needs compared with students in high school. Training at the building level may help address unique needs for the particular school.

It became apparent that, despite the need for additional professional development training, nearly all participants mentioned having a role in identifying, triaging, and monitoring student mental health needs, and every teacher discussed referring students to SBMHP. The purpose of the referral was sometimes to link the

student with more specialized and appropriate care. Other times, teachers felt unable to address student mental health needs on their own, so they referred the student for an evaluation of their current needs and/or involved other providers/educators in the school to better support the student. While all teachers had discussed referring a student to a mental health provider, some discussed challenges associated with referrals. For example, some were frustrated with a lack of follow-up. They acknowledged being aware of a counselor's responsibility to maintain confidentiality with the student; however, they expressed appreciation for instances in which the provider acknowledged the referral, and indicated that they were seeing the student.

While it is encouraging that all teachers discussed student referrals to mental health providers, this study elucidated the need for better processes in the student referral process. Sometimes, teachers were unclear in interviews and it was difficult to determine whether they were encouraging the student to visit the mental health provider or whether the teacher was submitting the referral directly to the provider. In either case, after the referral, it may be important for teachers to follow up with the student to see if the student has actually received mental health services. Since stigma is often a prominent barrier to help-seeking (Clement et al., 2015), merely encouraging a student to visit a provider may be insufficient when it is necessary for the child to be evaluated. Integrating a centralized referral system where teachers can submit referrals and mental health providers can indicate when they have seen a student may help to reduce some of the challenges that emerge from an informal referral system (e.g., uncertainty regarding whether the student was seen by a mental health provider).

Through the interviews, it became apparent that teachers were also considering mechanisms and processes that could prevent and/or improve students' mental health. Teachers acknowledged playing an integral role in addressing student mental health concerns across levels of the school system. While all participants mentioned working directly with students to address student mental health needs, many also recognized a role in systems-level promotion efforts, often through school climate improvement efforts, within school collaboration, the incorporation of mental health materials into the curriculum, and/or advocating for procedural changes. Teachers' acknowledgement of their role in mental health promotion efforts aligns well with literature suggesting that the impact of school factors on both students' academic achievement and mental health outcomes is mediated through teachers' role in mental health promotion (Lynn, McKay, & Atkins, 2003). Further, for school mental health efforts to be successful, the social network within the school must be favorable to mental health promotion efforts (Atkins et al., 2010).

In this study, teachers discussed the importance of contributing to a school climate conducive to the integration of mental health supports. For example, they emphasized collaborating with SMHPs and discussed hope for a partnership leading to the creation of a school culture that is more positive towards mental health. Teachers discussed specific strategies such as hanging posters in the school or sponsoring student clubs that address mental health (e.g., promoting body positivity). They noted that a positive school climate would not only make help-seeking more acceptable, decrease the stigma related to help seeking, but could also create a more positive environment for students (e.g., make students feel welcomed and supported



at school) and reduce their mental health struggles. Further, previous work has linked a positive school climate with encouraging outcomes across an array of areas. For example, students who perceive their school to have a positive school climate in general may be buffered against negative mental health outcomes associated with victimization (Wang, La Salle, Wu, Do, & Sullivan, 2018). At the systems level, schools with better climates (e.g., more safety, engagement, and positive environment) are more likely to have students with lower mental health stigma and higher depression literacy (Townsend et al., 2017). They argue that schools must consider climate when considering implementing mental health programming, as the climate of the school may moderate the effects of mental health promotion efforts.

In addition to collaborating with SMHP to reduce stigma and improve school climate, teachers also discussed consulting and collaborating with SMHP in an effort to acquire more knowledge and to identify the best strategies to address school mental health concerns. Some participants informally collaborated with mental health professionals to deliver classroom-based interventions, while others created student-specific interventions as part of formal multi-disciplinary teams that included a mental health provider. Teachers in this study, however, did not acknowledge formal coaching or consultation from mental health providers. Formal coaching by mental health providers, however, is related to closer teacher-student relationships, higher academic self-concept, and lower peer victimization (Cappella et al., 2012). Therefore, this study suggests that teachers naturally seek assistance from SMHP, though their efforts may be enhanced through formal coaching and consultation efforts.

Teachers' interest in collaboration also related to their expressed interest in systems-level changes such as the incorporation of mental health materials into the curriculum. The approach they supported appeared in alignment with large-scale efforts to move the field towards multi-tiered systems of support (Doll, 2019). Some talked about integrating mental health services into Positive Behavioral Interventions & Supports (PBIS), while others were more general with their wishes and wanted mental health lessons woven into the existing curriculum (e.g., include books about mental health difficulties in the curriculum). Initiatives to incorporate mental health supports into PBIS and into the existing curriculum may reduce the burden placed on teachers to carve out additional time for a separate lesson on mental health. The finding that the majority of teachers wanted to integrate information on mental health into the curriculum was particularly encouraging since literature suggests that school mental health providers are under-resourced and over-burdened. For example, the National Association of School Psychologists recommends one school psychologist for 500-700 students (National Association of School Psychologists, 2017). However, the national average is estimated to be around one school psychologist per 1400 students (National Association of School Psychologists, 2017). Since school psychologists are often over-burdened, and have a difficult time reaching students needing of services, having these providers implement mental health lessons in classrooms can be challenging. Teachers are effective implementers of tier one interventions (Franklin et al., 2012) and over half of the teachers in this study expressed interested in integrating mental health information into the curriculum.

Therefore, utilizing teachers as tier one interventionists may allow for more students to be reached.

#### Limitations

We used a convenience sample of participants. Because of the sampling procedures, participants in this study were somewhat younger and less experienced teachers/educators. Further, many of these participants were involved in AmeriCorps programs that trained and prepared educators through non-traditional means. Participants tended to work in areas with high-need students. As a result, participants' thoughts about what may help students for school based mental health services may not reflect educators' perceptions in areas with more available resources. Participants were required to have at least one year of experience teaching secondary-aged students in order to qualify for the study. Since it was not required for participants to have classroom experience as lead teachers, the sample reflects participants with various job titles and duties at school. On the one hand, it is a strength that this study includes classroom educators (teachers assistants) who were often not included in previous studies but that provide substantial classroom support and forge close relationships with students and their families. Conversely, participants have a variety of perspectives and responsibilities, and it is not clear which themes are relevant to classroom professionals serving in a particular role.

The coding process focused on answering the research questions. Because of this, there was not an emphasis on allowing findings to emerge naturally. Therefore, there may have been unique findings that could have emerged from the analyses that

were overlooked due to the strict adherence of answering the research questions. Future studies should allow for a more flexible approach to the coding process.

Through the interviews, we learned that many of the participants worked in schools with high proportions of Black and Latinx students, though data on school demographics were not collected for every educator. It is notable that many educators were white and taught in schools that enrolled mostly Black and Latinx students since student race/ethnicity is related to school mental health referrals. For example, Asian students are under-referred for services (Guo, Kataoka, Bear, & Lau, 2014) and Black students are receiving special education services at disproportionate rates (Ed.gov, 2014). Therefore, future studies should ask educators more systematically about the schools in which they teach. Additionally, future studies should ask teachers directly about their perceptions regarding how student race/ethnicity influences mental illness symptoms and referral processes. Additionally, since race and ethnicity can impact how people experience mental illness (e.g. Asians tend to experience more somatic symptoms than Whites when experiencing depression; Heppner, Wampold, Owen, Thompson, & Wang, 2015), future studies should evaluate teachers' knowledge of the expression of mental health concerns from a multicultural framework. Finally, while there is less literature on the impact of teacher race/ethnicity and gender on student mental health outcomes, participants in this study were mostly White (70%) and women (59%). While this is reflective of the profession (in 2015-2016, 80% of teachers were White and 80% were Women (Loewus, 2017)), future studies should recruit more racially and culturally diverse teachers. Future work should also seek to

understand how teacher identity characteristics (e.g., gender and race) impact student mental health.

# Appendices

## Survey Questions

### Demographic information

Age \_\_\_\_\_ Gender \_\_\_\_\_ Years of teaching \_\_\_\_\_  
Highest level of education (e.g., Ph.D., Masters', BA/BS, 2-year college, high school)  
\_\_\_\_\_ Which grade are you currently teaching \_\_\_\_\_  
In which state are you currently teaching \_\_\_\_\_  
Race/Ethnicity \_\_\_\_\_ Country of origin \_\_\_\_\_ Years in U.S. (if not born in  
U.S.) \_\_\_\_\_

Please read the following scenario and answer the questions based on what you read.

Linlin is a 12-year-old girl. Linlin's current weight is below average for her age and height. However, she thinks she is overweight. Upon starting sixth grade, Linlin started running regularly every day after school. Through this effort she gradually began to lose weight. Linlin then started to "diet", avoiding all fatty foods, not eating between meals, and trying to eat set portions of "healthy foods", mainly fruit and vegetables and bread or rice, each day. Linlin also continued running, losing several more pounds. However, she has found it difficult to maintain the weight loss and for the past 18 months her weight has been continually fluctuating, sometimes by as much as 5 pounds within a few weeks. Linlin has also found it difficult to control her eating. While able to restrict her dietary intake during the day, at night she is often unable to stop eating, bingeing on, for example, a loaf of bread and several pieces of fruit. To counteract the effects of this bingeing, Linlin takes laxative tablets. On other occasions, she vomits after overeating. Because of her strict routines of eating and exercising, Linlin stopped hanging out with her friends on the weekends, like she used to.

What would you say is Linlin's main problem? (choose all that apply)

Mental illness	
An exercise disorder or problem	
Anorexia nervosa	
A nutritional deficiency	
No real problem, just stress	
Low self-esteem or lack of self-confidence	
A hormone problem	
Loneliness	
Yo-yo eating	

An anxiety disorder or problem	
Diabetes	
A binge eating disorder or problem	
Depression	
Bulimia nervosa	

Please read the following scenario and answer the questions, based on what you read:

Wenwen is a 13-year-old girl who is feeling unusually sad for the last few weeks. She feels tired all the time and she has problems falling asleep. When she is able to fall asleep, she wakes up many times. She has lost her appetite and lately has lost some weight. It is difficult for her to concentrate and her grades have dropped. Her daily activities are a lot for her to handle, which led to her decision to stop attending piano lessons. She also stopped hanging out with her friends, who she used to spend time with every Friday afternoon. Her parents and friends are very worried about her.

In your opinion, what is going on with Wenwen (choose all that apply)?

I do not know.	
There is nothing wrong with her.	
She has depression.	
She is schizophrenic.	
She has a mental illness.	
She has bulimia.	
She is having a nervous breakdown.	

### Interview Questions

Start the interview by asking the participant to tell you about their teaching experience (grades/classes taught, type of school, years experience, etc.)

NOTE: If you are not clear about an answer, always ask for clarification. Also ask follow up questions, e.g., can you tell me more about xxx?

Please read the following story:

Linlin is a 12-year-old girl. Linlin's current weight is below average for her age and height. However, she thinks she is overweight. Upon starting sixth grade, Linlin started running regularly every day after school. Through this effort she gradually began to lose weight. Linlin then started to "diet", avoiding all fatty foods, not eating between meals, and trying to eat set portions of "healthy foods", mainly fruit and vegetables and bread or rice, each day. Linlin also continued running, losing several more pounds. However, she has found it difficult to maintain the weight loss and for the past 18 months her weight has been continually fluctuating, sometimes by as

much as 5 pounds within a few weeks. Linlin has also found it difficult to control her eating. While able to restrict her dietary intake during the day, at night she is often unable to stop eating, bingeing on, for example, a loaf of bread and several pieces of fruit. To counteract the effects of this bingeing, Linlin takes laxative tablets. On other occasions, she vomits after overeating. Because of her strict routines of eating and exercising, Linlin stopped hanging out with her friends on the weekends, like she used to.

1. This question is related to the scenario you just read about Linlin. In your opinion, what is going on with Linlin? Please tell me more about this (or why you think she has xxx). How often do you see what happened to Linlin happening among female students? How about among male students? Among minority students (e.g., Asian American) vs. White students?
  - a. If what happened to Linlin happened to your students, what would you do? [Follow up question] Tell me more. (If they talked about making referrals, ask them about their previous experience. E.g., have you referred a student to your counselor/school psychologist? What was the experience like for you and for your student?)
2. Have you ever personally known a student or teenager who you think might have an eating disorder (note: both from their experience as a teacher or personal life)?
  - a. Tell me what you see or saw in that person that makes you think he/she might have an eating disorder.
3. If someone is struggling with an eating disorder, what do you think are some appropriate forms of support or services for them?
4. How do you think eating disorders can be prevented? What do you think are some activities that could be helpful for someone who has an eating disorder? What do you think teachers or school mental health providers can do to help prevent eating disorder? (e.g., What role does school play in preventing eating disorder?)

Please read the following story:

Wenwen is a 13-year-old girl who is feeling unusually sad for the last few weeks. She feels tired all the time and she has problems falling asleep. When she is able to fall asleep, she wakes up many times. She has lost her appetite and lately has lost some weight. It is difficult for her to concentrate and her grades have dropped. Her daily activities are a lot for her to handle, which led to her decision to stop attending piano lessons. She also stopped hanging out with her friends, who she used to spend time with every Friday afternoon. Her parents and friends are very worried about her.



1. This question is related to the story you just read about Wenwen. In your opinion, what is going on with Wenwen? Tell me more about it. How often do you see what happened to Wenwen happening among female students? How about among male students? Among minority students (e.g., Asian) vs. White students?
  - a. What do you think can be done to help Wenwen?
  - b. If Wenwen is your student, what would you do?
2. Have you ever personally known a student who you think might be depressed?
  - a. Tell me what you see or saw in that person that makes you think he/she might be (or was) depressed.
3. Have you ever personally known a student who you think might be anxious/have an anxiety disorder?
  - a. Tell me what you see or saw in that person that makes you think he/she might be (or was) anxious.
4. If someone is struggling with depression or anxiety, what do you think are some ways to help them? [Possible follow up questions] Are there any other ways you think may be helpful? What do you think teachers or school mental health providers can do to help prevent depression or anxiety among students?
5. What do you perceive as the most important mental health needs for students at school? Are those needs met at your school? If the answer is No, ask what challenges school face to meet students' needs.
  - a. Ask them to describe the mental health services available at their school. Who are the providers? How those providers (e.g., school psychologists, school counselors) collaborate with teachers?
6. What do you think are the barriers or challenges for students to seek help from counselors or psychologists for depression or anxiety or other mental health difficulties at school?
  - a. Are the barriers different for boys vs. girls? For White students vs. minority students (e.g., Asian students)? If they are not able to answer this question, to get the conversation going, you can also tell teachers that research has shown that girls are more willing to seek help than boys, minority students are less likely to seek help.
7. What can teachers, counselors, school psychologists, and other adults do to improve those barriers for help seeking?

8. How are those barriers for school based mental health services different from seeking help from counselors or psychologists outside of school?
9. What other suggestions do you have for the schools in meeting students' mental health needs?
10. Now we're going back through some of the survey questions and I have some follow up questions for you regarding why you think certain providers and activities are helpful.
  - a. To kick things off—would you recommend different providers for different mental health concerns?
  - b. For Linlin, the first vignette that you read, you mentioned that you thought XXX person would be helpful/harmful/neither to Linlin. You also indicated that you would/would not/would potentially recommend Linlin seek help from XXX provider. Could you tell me more about that?
  - c. Also for Linlin, you mentioned that you think XXX activity would be helpful/harmful/neither to Linlin, could you tell me more about why you think that?
  - d. For Wenwen, the second vignette that you read, you mentioned that you thought XXX person would be helpful/harmful/neither to Wenwen. You also indicated that you would/would not/would potentially recommend Wenwen seek help from XXX provider. Could you tell me more about that?
  - e. Also for Wenwen, you mentioned that you think XXX activity would be helpful/harmful/neither to Wenwen, could you tell me more about why you think that?

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