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Mental health literacy: Investigating adolescents' knowledge of depression and professional sources of help

Jessica A. Meeks
James Madison University

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Mental Health Literacy: Investigating Adolescents' Knowledge of Depression and
Professional Sources of Help

Jessica A. Meeks, M.A.

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FACULTY COMMITTEE:

Committee Chair: Deborah Kipps-Vaughan, Psy.D.

Committee Members/Readers:

Ashton Trice, Ed.D.

Timothy Shulte, Psy.D.

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Abstract

Depression is one of the most common mental health disorders affecting adolescents, and there is evidence suggesting that there are adolescents suffering from depression who are not receiving treatment (Mojtabai, Offson, & Han, 2016). The increasing presence of mental health professionals and mental health services in public schools is one solution to the treatment gap. However, less is known about adolescents' understanding of depression and treatment options. The current study utilized an online survey to examine the mental health literacy of 38 ninth grade students. Results indicated that adolescents have a moderate ability to recognize and label depression from brief case vignettes, and differentiate depressed and non-depressed scenarios. Additionally, adolescents were more likely to suggest an informal or non-professional source of help to a depressed peer. Finally, adolescents demonstrated poor knowledge of some school-based mental health professionals, specifically school nurses, school psychologists, and school social workers. Conclusions from this study may aid in improving mental health awareness education in public schools and demonstrate the need for increased visibility of school-based mental health professionals.

Introduction

In the medical community, it is widely accepted that the public will benefit from knowledge of preventative actions, intervention, and treatment of major physical diseases (Jorm, 2012). Major public awareness campaigns have been conducted to increase the public's knowledge about a variety of health concerns, such as the risks of smoking, the warning signs and symptoms of heart attacks and cancer, and safe sex techniques to prevent HIV/AIDS. Many of these campaigns also include information about professionals in the medical community that the public can seek out for assistance. These campaigns have also been tailored to reach a variety of audiences, including children and adolescents. In many cases, the knowledge of physical diseases has led to increased help seeking behavior. In contrast, the public's overall knowledge of various mental health disorders and their prevention and treatment is lacking. This is concerning as several mental health disorders, such as depression, can begin in childhood or adolescence.

Depression is one of the most common mental health disorders affecting adolescents, with the prevalence of the disorder increasing during the adolescent period. A recent estimate of the lifetime prevalence of DSM-IV major depressive disorder and dysthymia was found to be 11.7% in a nationally representative sample of adolescents aged 13-18 (Merikangas et al., 2010). Furthermore, the prevalence of major depressive disorder in adolescents was found to have increased from 8.7% to 11.3% from the year 2005 to 2014 (Mojtabai, Offson, & Han, 2016). In contrast, the proportion of adolescents who received mental health treatment of any kind did not significantly change during that time, indicating that there are depressed adolescents who are receiving no treatment.

There could be several factors contributing to the gap between adolescent prevalence of depression and treatment seeking, including lack of access to treatment services, and lack of knowledge about depression and sources of treatment for the disorder. Lack of access to community based mental health services has long been a barrier to treatment for young people and their families. In the last few decades, the view of schools as solely a place for education has decreased and there has been a push for school-based mental health services (Rones & Hoagwood, 2000).

Mental Health Services in Schools

Rones and Hoagwood (2000) conducted a review of the research literature on school-based mental health services between 1985 and 1999. The 47 studies included in the review were evaluations of school-based programs developed to target emotional and behavioral problems, depression, conduct problems, stress management, and substance use. The programs ranged from universal preventative intervention for all students to targeted interventions for students who were found to have indicators or symptoms of mental health problems. The authors found five key components that were indicative of success or effectiveness of program outcomes: consistent implementation, inclusion of parents, teachers, and peers in the intervention process, the use of multiple intervention modalities, integration of the program intervention into the classroom curriculum, and inclusion of developmentally appropriate program components. Among the six cognitive-behavioral programs that targeted depression, three were reported to be effective, two were not effective, and one program had mixed results. Psychoeducation and teaching specific skills were associated with program success, while shorter program duration and limited intervention focus were associated with negative outcomes.

In 2005, the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (SAMHSA) published a report containing results from a national survey of mental health services in public schools in the United States for the 2002-2003 academic year (Foster et al., 2005). The study had several aims, including the identification of the mental health problems most prevalent in public schools, mental health services provided by schools, and the types of staff providing mental health services. The authors found that, across school level and gender, social, interpersonal, or family problems were the mental health problems most frequently reported by schools. In male students, the next two most frequently reported mental health problems were aggressive/disruptive behaviors and behaviors resulting from a neurological disorder like attention-deficit/hyperactivity disorder. In female students, the next two most frequently reported mental health problems were anxiety and adjustment issues. For both male and female students, depression and grief reactions, and substance use or abuse increased across school level. Of the various mental health services provided by surveyed schools, assessment for mental health problems, behavior management consultation, and crisis intervention were tied for the most frequently provided services. The next three most provided services were referrals to specialized programs/services, individual counseling/therapy, and case management. Medication/medication management was the mental health service provided the least. The most common mental health providers employed by schools were school counselors, school nurses, school psychologists, and school social workers. Of these four professions, school social workers and school counselors reportedly spent over half of their time provided mental health services, while

school psychologists and school nurses spent 48% and 32% of their respective time providing mental health services.

The Every Student Succeeds Act of 2015, the recent reauthorization of No Child Left Behind, makes specific mention of mental and behavioral health services as being an integral part of comprehensive learning supports for students. Untreated mental health disorders, like depression, can certainly have a negative impact on young people's academic performance. Therefore, the integration of mental health services into overall learning supports should promote screening and treatment efforts for students with emotional and behavioral problems. Less is known about adolescents' knowledge of depression. Unfortunately, depression has become synonymous with general sadness in our societal lexicon, which may cause adolescents to think of depression as emotional difficulties that do not require treatment. Understanding what adolescents know about the symptoms of depression and mental health professional qualified to provide treatment can inform intervention planning and mental health awareness campaigns in schools.

Mental Health Literacy

Jorm and colleagues (1997) coined the term mental health literacy, which "includes the ability to recognize specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking" (p. 182).

Since the publishing of this pivotal article, there have been dozens of studies examining mental health literacy in different populations around the world. The majority of the mental health literacy literature focuses on recognition of specific disorders, help-

seeking behaviors, and knowledge of available professional help. Knowledge of depression, schizophrenia, and personality disorders have received the most focus in the literature, along with conduct disorders and anxiety disorders. The bulk of the literature used adults as participants, although there have been several studies examining mental health literacy in adolescents. Methodology amongst these studies is typically similar, with case scenarios or vignettes of characters with symptoms of the target mental health disorders presented to participants. Participants are then asked to describe what is wrong with the characters, and to identify appropriate sources of help.

Mental health literacy studies with adults. Farrer and colleagues (2008) investigated the mental health literacy of a large sample of Australian adults. Participants were presented with a vignette of a character displaying symptoms of either depression or schizophrenia. They were then asked what was wrong with the characters, to name sources of help, to rate a list of treatments as helpful, and to rate a list of causes for the disorder presented in the vignettes. The authors divided the sample into five age groups to analyze their data: 18-24, 25-39, 40-54, 55-69, and 70+ years. Results revealed that, in general, the oldest adults (70+ years) were the least accurate age group at correctly identifying symptoms in either vignette as depression or schizophrenia. Younger adults (18-24) were more accurate than the oldest adults at correctly identifying symptoms of depression, but were significantly more likely than the oldest adults to misidentify the symptoms of schizophrenia as depression. For the depression vignette, all five age groups considered a doctor or general practitioner to be the most appropriate source of help. In contrast, for the schizophrenia vignette, friends/family were considered the best source of help by the 18-24 age group, while responses for all other age groups were coded in the

'other' category. For both vignettes, younger adults rated informal sources of help more favorably than the oldest adults did, but the oldest adults rated fewer treatments as favorable and more likely to believe that schizophrenia to be due to character weaknesses. The authors theorized that the differences between the oldest adults and younger adults could be due to higher rates of stigma regarding mental health problems in older people, and school programs about mental health that the younger adults had access to but were not available in earlier decades.

Mental health literacy studies with adolescents. In a search of the literature on mental health literacy, eleven studies were found that measured adolescents' knowledge of depression. Three studies took place in Australia, three in the United States, two in Ireland, one in Sweden one in China, and one in Nigeria. Ten of the studies used case presentations or vignettes as the sole method of presenting the mental health symptoms, while one study used a mix of vignettes and short film clips. Depression was the only mental health disorder investigated in a majority of the studies, while a minority of studies investigated depression and one other mental health disorder, which included schizophrenia, social anxiety/social phobia, and ADHD.

Burns and Rapee (2006) investigated the mental health literacy of a sample of adolescents in Australia. Participants were presented with five vignettes of adolescent characters experiencing a variety of life events. In two of the vignettes, one depicting a female adolescent (Emily) and the other a male adolescent (Tony), the characters displayed at least five symptoms of a major depressive episode as described in the DSM-IV, indicating significant depression. The characters in the other three vignettes displayed signs of sadness or distress that did not reach clinical levels. For each vignette,

participants were asked to describe in their own words what was going on with the characters; identify parts of the vignettes that indicated emotional distress; estimate how long it would take for characters to feel better; and identify who they thought could help the characters with their problems. Results revealed that a majority of participants (67.5%) identified Emily's symptoms as depression, while just 33.8% of participants identified Tony's symptoms as depression. The authors suggested that a reason for the difference in identification was that Emily's vignette contained suicidal ideation and feelings of worthlessness while Tony's vignette contained less "obvious" symptoms of depression, indicating that participants had more difficulty recognizing the combination of those symptoms as depression. In response to the help-seeking question for the two depression vignettes, about half (57.7%) of participants suggested that a counselor could help the characters, followed by friends (41.8%) and family (40.8%). The next three most popular sources of help were a professional, a psychologist, and a psychiatrist, with less than 10% of participants recommending each. The authors theorized that participant familiarity and access to school counselors as well as lack of knowledge of more specialized mental health professionals as a potential reasons for the finding.

Four studies utilized all or some of the questionnaire used in the Burns and Rapee (2006) study. McCarthy, Bruno, and Fernandes (2011) replicated Burns and Rapee with a small sample of American adolescents. Their results were similar to Burns and Rapee, with more participants identifying Emily's symptoms as depression (75% of participants) compared to Tony's symptoms (58.1% of participants). In addition, family was one of the top three suggested sources of help for both Emily and Tony, along with a psychiatrist and friends for Emily, and a counselor and friends for Tony. Byrne, Swords, and Nixon

(2015) adapted the Burns and Rapee questionnaire for use with Irish adolescents, and included questions about help-giving behavior. About half (51.3%) of participants identified Emily's symptoms as depression, while 32.6% identified Tony's symptoms as depression. Participants' responses to the help-seeking question were coded differently than in Burns and Rapee, with all mental health professionals combined into one category. Nevertheless, results were similar to Burns and Rapee, with the three most popular suggested sources of help being mental health professionals (65.8%), friends (54.5%), and family (53.5%).

Coles and colleagues (2016) modified the Burns and Rapee questionnaire for use with a large sample of American adolescents. The Tony depression vignette and one of the non-clinical vignettes from Burns and Rapee were presented to adolescents along with a vignette depicting a character with social anxiety disorder. Although less than half (40%) of participants identified Tony's symptoms as depression, only 1% of participants identified the symptoms in the social anxiety disorder vignette as social anxiety disorder. The authors used a narrow definition for correct recognition of social anxiety disorder; participants' responses of "anxious" or "anxiety" for the character were coded as incorrect. In regards to help seeking, 68.8% of participants recommended that the depressed character seek help, compared to 59.2% for the character with social anxiety disorder. The two most popular sources of help for both the depression vignette and the social anxiety disorder vignette were family and friends. Marshall and Dunstan (2011) partially replicated Burns and Rapee with a sample of rural Australian adolescents. The Emily depression vignette and one of the non-clinical vignettes were presented to participants. The authors also developed two short films based on the Tony depression

vignette and another of the non-clinical vignettes. In addition, the questionnaire contained two additional questions related to help seeking and the participants' perceptions of the character's behavior. Results revealed that 68.0% of participants identified symptoms in the Emily vignette as depression compared to 23.0% of participants for the short film depicting a character with depression. Similar to Burns and Rapee, the three most popular sources of help for the depressed characters were friends (64.8%), family (62.3%), and a counselor (54.1%).

Recognition of depression. Rates of depression recognition among participants in the studies varied, from as low as 10.4% in Nigerian adolescents to as high as 75% in one sample of American adolescents (Adeosun, 2016; McCarthy et al., 2011). In studies examining both depression and another mental health disorder, participants were more accurate at recognizing depression (Coles et al., 2016; Melas et al., 2013; Olsson & Kennedy, 2010). For the studies that presented two depression vignettes, participants in all of the studies were more accurate at identifying the symptoms of depression for the vignette that depicted suicidal ideation versus the vignette without it (Burns & Rapee, 2006; Byrne et al., 2015; Coles et al. 2016; Marshall & Dunstan, 2011; McCarthy et al., 2011).

Sources of help. In almost all of the studies, participants suggested informal sources of help, such as family or friends, for the depressed vignette character (Burns & Rapee, 2006; Byrne et al., 2015; Coles et al. 2016; Lam, 2014; Marshall & Dunstan, 2011; Melas et al., 2013; Swords et al., 2011). The most endorsed source of professional help in these studies was a counselor, or more generally, a mental health professional or other health professional. Psychologists and psychiatrists generally received lower rates

of endorsement by participants, which some authors attributed to the lack of familiarity with these types of mental health professionals compared to a counselor (Burns & Rapee, 2006; Marshall & Dunstan, 2011).

The Study Purpose

The aim of the current study was to add to the body of literature on mental health literacy as it pertains to depression in American adolescents. This study involved a partial replication of Burns and Rapee (2006), with a larger emphasis on adolescent help-seeking behavior and knowledge of school-based mental health professionals. The current study examined the responses of adolescents, in order to address the following research questions:

1. How accurate are adolescents at identifying a cluster of depression symptoms in their peers as ‘depressed’?
2. What emotional aspects of depression can adolescents identify?
3. What behavioral aspects of depression can adolescents identify?
4. Who do adolescents recommend their depressed peers seek help from?
5. How much do adolescents know about different school-based mental health professionals?

Methods

Participants

Participants included 38 ninth grade students from a large, diverse public high school in the Central Virginia area during the 2017-2018 academic year. This high school has several full-time school counselors who were present at the school five days per week, one full-time nurse and/or full-time clinic assistant, one full-time school

psychologist who was present at the school three days per week, and one full-time school social worker who was present at the school at least two days per week. Participants consisted of 20 male and 18 female students. In regards to ethnicity, 20 participants identified as Caucasian, eight identified as African American, five identified as Hispanic, four identified as biracial or multiracial, and one identified as Asian. Ninth grade students were chosen because they are required to take a Physical Education/Health course. The ninth grade Health curriculum includes instruction related to mental health disorders.

Measure

A modified version of the *Friend in Need Questionnaire* developed by Burns & Rapee (2006) was used. Qualtrics, a web-based survey service, was used to create, collect, and store survey items and responses. The survey contained three of the five brief vignettes from Burns and Rapee of adolescents going through emotional difficulties. In two of the three vignettes, the adolescent characters displayed significant signs of depression, with each vignette containing five of the nine symptoms of a Major Depressive Disorder as described in the DSM-IV (DSM-IV: American Psychiatric Association, 1994). Depression symptomology from the DSM-IV rather than the DSM-V was used as these vignettes were directly adapted from the Burns and Rapee study. The third vignette described an adolescent going through a “typical” life crisis, with no evidence of substantial depressive symptomology. Survey questions are listed in Appendix A.

For each vignette, participants were asked to identify what is going on with each character; what specifically in the vignettes made them worry about each character; who they think each character should go to for help with their problems; and whether the

character should seek help from a mental health professional. Participants were asked a series of questions about their knowledge of different mental health professionals and personal help seeking behavior.

Procedures

Permission to conduct the survey was obtained from the public school system's research review committee. After a high school was selected, the researcher sent Parent/Guardian Informed Consent forms to students in five Physical Education/Health classes. Only students whose parents/guardians gave consent were included in the study. A Youth Assent form was presented to the students whose parents provided consent, and the survey was administered if assent was given. The researcher gave assenting students an anonymous link to the survey, and students completed the survey on their school-issued Chromebooks in their Physical Education/Health classroom or a separate room. Once the survey was closed, the data was stored electronically.

Results

Survey items from the modified *Friend in Need Questionnaire* were presented in multiple-choice, open-ended, and Likert-type formats. Multiple-choice and Likert-type items were summarized by descriptive statistics and frequency charts generated by the Qualtrics survey program. Open-ended responses were analyzed qualitatively using the cut and sort technique described in Ryan and Bernard (2003) to organize and categorize the results into themes. Many of the responses contained more than one theme or idea; therefore, responses had the potential to be sorted into multiple themes. Two of the vignettes, 'Tony' and 'Emily', contained five of the nine symptoms of a Major Depressive Disorder as described in the DSM-IV (DSM-IV: American Psychiatric

Association, 1994), and will be designated with ‘(D)’. The third vignette, ‘Mandy’, contained no clinical symptomology and will be designated with ‘(NC)’.

Research Question One

Participants were presented with one question to answer research question one, “How accurate are adolescents at identifying a cluster of depression symptoms in their peers as ‘depressed’?” For each vignette, participants were asked the open-ended question, “In five words or less, what do you think is the matter with [character]?” Similar to Burns and Rapee (2006), responses were coded based upon key words used by the participants. Any response with the presence of the words ‘depressed/depression’ or ‘suicide/suicidal’ were coded as ‘Depressed’. Responses that did not contain those key words were coded as ‘Other’. Of the 38 respondents, 23 (61%) labeled Emily as depressed, while 22 (58%) labeled Tony as depressed. None of the participants labeled Mandy as depressed. The most common ‘Other’ response for both the Tony and Emily vignettes was ‘upset’, which included responses such as ‘mad’, ‘sad’, ‘worried’ and ‘upset’. The most common ‘Other’ responses for the Mandy vignette were ‘heartbroken’ and ‘upset’, which included responses such as ‘mad’, ‘sad’, and ‘upset’. Data are presented in Table 1.

Table 1
Recognition of Depression

Theme	Tony (D) <i>f</i>	Tony (D) %	Mandy (NC) <i>f</i>	Mandy (NC) %	Emily (D) <i>f</i>	Emily (D) %
Depressed	22	58%	0	0%	23	61%
Other	16	42%	38	100%	15	39%
Heartbroken	0	0%	15	39%	0	0%
Upset	9	56%	13	33%	6	40%

Research Question Two and Three

Participants were presented with one question to answer research questions two and three, “What emotional aspects of depression can adolescents identify?” and “What behavioral aspects of depression can adolescents identify?” For each of the two vignettes that contained depression symptoms, participants were asked the open-ended question, “Which parts of [character] story are the strongest hints to you that he/she might be experiencing emotional difficulties? (Please quote the words from the scenarios that are the strongest hints.)” The ‘Tony’ and ‘Emily’ vignettes each contained five of the nine symptoms of a Major Depressive Disorder as described in the DSM-IV (DSM-IV: American Psychiatric Association, 1994). Four symptoms were coded as behavioral aspects of depression: fatigue/loss of energy, insomnia, weight loss/decreased appetite, and diminished ability to think/concentrate. Four symptoms were coded as emotional aspects of depression: diminished interest in activities, depressed mood, feelings of worthlessness, and suicidal thoughts. The ‘Tony’ vignette contained four behavioral symptoms and one emotional symptom, while the ‘Emily’ vignette contained four emotional symptoms and one behavioral symptom.

The symptom that participants quoted the most frequently (22%) from the ‘Tony’ vignette was his lack of interest in previously enjoyed activities, followed by weight loss and decreased appetite (19%), trouble getting to sleep at night (19%), poor concentration (17%), and fatigue (17%). Five responses (6%) did not reference any of the DSM-IV depression symptoms; these responses were coded as ‘Other’. It was noted that twelve participants mentioned deterioration in Tony’s grades as a hint that he was experiencing emotional distress. The symptom that participants quoted the most frequently from the ‘Emily’ vignette, was her feeling “useless” and “good for nothing” (33%), followed by

suicidal thoughts (27%), regularly appearing sad and tearful (13%), lack of interest in previous enjoyed activities (12%), and loss of energy (12%). Three responses (4%) did not reference any of the DSM-IV depression symptoms; these responses were coded as ‘Other’. For the ‘Mandy’ vignette, the elements participants quoted as indicating emotional distress were frequent crying (37%), poor concentration (31%), and having a low self-concept (21%). Seven responses (11%) referenced the overall situation rather than Mandy’s behavior and were coded as ‘Other’. Data for the vignettes containing depression symptoms are presented in Table 2.

Table 2
Identified Symptoms of Depression

Symptom	Tony (D) <i>f</i>	Tony (D) %	Emily (D) <i>f</i>	Emily (D) %
Emotional				
Feelings of worthlessness	0	0%	26	33%
Suicidal ideation	0	0%	21	27%
Diminished interest in activities	17	22%	9	12%
Depressed mood	0	0%	10	13%
Behavioral				
Insomnia	15	19%	0	0%
Weight loss/decreased appetite	15	19%	0	0%
Fatigue/loss of energy	13	17%	9	12%
Diminished ability to think	13	17%	0	0%
Other	5	6%	3	4%

Research Question Four

Participants were presented with multiple questions to answer research question four, “Whom do adolescents recommend their depressed peers seek help from?” For each vignette, participants were asked, “Do you think [character] needs to seek help from another person to cope with his/her problem?” For the vignettes with depression

symptoms, 32 (84%) participants thought Tony needed to seek help from another person, while 29 participants (76%) thought Emily needed help from another person. For the vignette without depression symptoms, 24 participants (63%) thought Mandy needed help from another person. If participants responded 'Yes' to the question, they were also asked to state whose help was needed. Responses were tallied and combined to provide results for the vignettes containing depression symptoms listed in Table 3. The 'Family' category included mention of the terms 'parents', 'relative', 'family', and 'mother/father'. The 'Friends' category included mention of the terms 'friend' and 'peers'. 'Counselor' and 'counselling' were combined into the 'Counselor' category. Vague references to an 'adult', 'trusted adult', and 'older figure' were combined into the 'Adult' category. The use of non-specific terms such as 'professional', 'professional help', and 'professional person' were combined into the 'Professional' category. Vague references to 'someone', 'loved one', 'people with the same experience', and 'everyone' were combined into the 'Someone' category. Specific terms such as 'psychologist', 'psychiatrist', 'doctor', 'mental health professional', and 'therapist' were listed as separate categories. Responses that did not reference a person or profession were categorized as 'Other'.

Friends (25%), family (21%), and counselor (15%) were the top three most recommended sources of help for Tony, followed by therapist (12%), vague references to an adult (8%), vague references to someone (6%), psychologist (4%), mental health professional (4%), teacher (2%), doctor (2%). Two responses (4%) were categorized as 'Other'. Friends (24%), family (22%), and counselor (16%) were the top three recommended sources of help for Emily, followed by vague references to someone (10%), non-specific references to professional help (8%), mental health professional

(6%), therapist (6%), psychologist (4%), psychiatrist (2%), and doctor (2%). One response (2%) was coded as ‘Other’. For Mandy, friends (53%) and family (31%) were the top two most recommended sources of help, followed by a counselor (6%), and vague references to someone (6%). Two responses (6%) were coded as ‘Other’.

Table 3
Recommended Sources of Help for ‘Depressed’ Vignettes

Source of Help	Tony (D)		Emily (D)	
	<i>f</i>	%	<i>f</i>	%
Family	11	21%	11	22%
Friends	13	25%	12	24%
Teacher	1	2%	0	0%
Someone	3	6%	5	10%
Adult	4	8%	0	0%
Professional	0	0%	4	8%
Doctor	1	2%	1	2%
Mental Health Professional	2	4%	3	6%
Counselor	8	15%	8	16%
Therapist	6	12%	3	6%
Psychologist	2	4%	2	4%
Psychiatrist	0	0%	1	2%
Other	2	4%	1	2%

Participants were also asked, “Do you think [character] needs to seek help from a mental health professional? (A mental health professional is a health care practitioner or community services provider who offers services for the purpose of improving an individual's mental health or to treat mental disorders)” Twenty-six participants (68%) responded ‘Yes’ to the question for Emily, while 21 participants responded ‘Yes’ for Tony (55%), and two (5%) responded ‘Yes’ for Mandy. Participants who responded affirmatively or negatively to the question were asked why they gave the response. Participants’ justifications for responding ‘yes’ were similar to responses to the question asking participants to quote parts of the character’s stories. Participants’ justifications for responding ‘no’ to the question for Mandy mainly referenced that she was not depressed,

that her situation was a common one, and that she would work past her distress in time. For Tony, participants stated that he was being “overdramatic”, did not have “mental problems” or need “mental help”, and that he would “get over” his situation. For Emily, participants state that she “made a mistake”, was being “overdramatic”, and only needed to talk to friends or family.

Following the three vignettes, participants were presented with a list of 10 individuals and asked to rate each individual on a scale of 1-5 how qualified the individual was at helping each character with his/her problem, with five being the most qualified and one being the least qualified to help. The individuals listed were ‘Doctor’, ‘[Character’s] Family Member’, ‘Friend’, ‘Principal’, ‘Clergymember’, ‘School Counselor’, ‘School Nurse’, ‘School Psychologist’, ‘School Social Worker’, and ‘Teacher’. The response rate for the listed individuals varied, as many of the participants rated some but not all of the choices. Participants rated Tony’s family member as being the most qualified to help him (M=3.83), while a clergy member was rated as the least qualified (M=1.88). A friend was rated as the most qualified (M=4.18) to help Mandy, while a principal was rated as the least qualified (M=1.59). Participants rated Emily’s family member as the most qualified to help her (M=3.95), while a principal was rated as the least qualified (M=1.90). Data are presented in Table 4.

Table 4
Mean Level of Helpfulness by Individual (1-5 Scale)

Individual	Mean (SD) for Tony (D)	Mean (SD) for Mandy (NC)	Mean (SD) for Emily (D)
Doctor	3.06 (1.39)	2.00 (1.12)	3.90 (1.17)
Character’s Family Member	3.83 (0.96)	4.11 (0.97)	3.95 (1.16)
Friend	3.57 (1.15)	4.18 (1.05)	3.68 (1.21)
Principal	1.97 (0.67)	1.59 (0.69)	1.90 (0.99)
Clergymember	1.88 (0.83)	2.00 (0.89)	2.00 (1.21)

School Counselor	3.14 (1.20)	3.24 (1.18)	3.42 (1.19)
School Nurse	1.90 (0.83)	2.07 (1.06)	2.33 (1.08)
School Psychologist	3.79 (1.12)	3.00 (1.33)	3.63 (1.17)
School Social Worker	2.84 (1.32)	2.19 (1.33)	2.41 (1.63)
Teacher	2.70 (1.01)	2.45 (0.99)	2.52 (1.05)

Research Question Five

Participants were presented with multiple questions to answer research question five, “How much do adolescents know about different school-based mental health professionals?” Four questions asked participants if they knew their assigned school counselor, as well as the school’s nurse, psychologist, and social worker. The majority (61%) of participants responded that they knew their assigned school counselor. Four (11%) participants knew their school nurse, although only one of the four respondents could provide the person’s name. One (3%) participant responded that they knew the school psychologist, and one (3%) participant knew their school social worker. Another set of questions gauged the participants’ level of knowledge about how each school-based mental health professional could help students experiencing emotional difficulties. In regards to how well they understood how the school counselor could help students with emotional difficulties, four participants (11%) responded with ‘Extremely well’, 11 (29%) selected ‘Very well’, 13 (34%) selected ‘Moderately well’, six (16%) responded with ‘Slightly well’, and four (11%) selected ‘Not well at all’. Concerning how well they understood how the school nurse could help students with emotional difficulties, two participants (5%) responded with ‘Extremely well’, three (8%) selected ‘Very well’, 10 (26%) selected ‘Moderately well’, 10 (26%) responded with ‘Slightly well’, and 13 (34%) selected ‘Not well at all’. In regards to how well they understood how the school psychologist could help students with emotional difficulties, six participants (16%)

responded with ‘Extremely well’, three (8%) selected ‘Very well’, five (13%) selected ‘Moderately well’, three (8%) responded with ‘Slightly well’, and 21 (55%) selected ‘Not well at all’. Concerning how well they understood how the school social worker could help students with emotional difficulties, three participants (8%) responded with ‘Extremely well’, two (5%) selected ‘Very well’, eight (21%) selected ‘Moderately well’, nine (24%) responded with ‘Slightly well’, and 16 (42%) selected ‘Not well at all’. Data are presented in Table 5.

Table 5
Knowledge Level of How School-Based Mental Health Professionals Can Help Students

	School Counselor	School Nurse	School Psychologist	School Social Worker
Extremely Well	11%	5%	16%	8%
Very Well	29%	8%	8%	5%
Moderately Well	34%	26%	13%	21%
Slightly Well	16%	26%	8%	24%
Not Well at All	11%	34%	55%	42%
Total Responses	38	38	38	38

Participants were asked to list at least two duties that they think the school counselor, school nurse, school psychologist, and school social worker do. Concerning perceived duties of the school counselor, 23 responses (43%) referenced the school counselor helping students with non-specific problems, 16 responses (30%) referenced class scheduling and helping with grades, 10 responses (19%) mentioned the school counselor providing non-specific help, and four responses (8%) referenced the school counselor helping with emotional problems. Concerning perceived duties of the school nurse, 19 responses (43%) mentioned the school nurse aiding students with illnesses or injuries, 11 responses (25%) referenced the school nurse helping students with non-specific health issues, 10 responses (23%) mentioned the school nurse providing non-

specific help, three responses (7%) mentioned providing medication, and one response (2%) referenced the school nurse providing health education. Concerning perceived duties of the school psychologist, 12 responses (32%) indicated no knowledge of the school psychologist's duties or knowledge that the participants' school had a school psychologist on staff, 10 responses (27%) referenced the school psychologist helping students with non-specific problems, eight responses (22%) mentioned the school psychologist providing mental health services to students, three responses (8%) mentioned non-specific help, three responses (8%) mentioned the school psychologist providing psychoeducation, and one response (3%) referenced the school psychologist referring students to community providers. Concerning perceived duties of the school social worker, 10 responses (27%) indicated no knowledge of the school social worker's duties or knowledge that the participants' school had a school social worker on staff; eight responses (22%) mentioned non-specific help; seven responses (19%) referenced the school counselor helping students with non-specific problems; five responses (14%) mention the school social worker reporting abuse or neglect to social services; three responses (8%) referenced class scheduling, helping with grades, and attendance; two responses (5%) mentioned the school social worker providing mental health services; one response (3%) referenced the school social worker referring students to community providers, and one response (3%) mentioned social skills training.

Additional Survey Questions

Participants were presented with several additional questions that did not directly pertain to any of the five research questions. For each vignette, participants were asked, "If [character] was your friend, how worried would you be about his/her overall

emotional well-being?” For the ‘Tony’ vignette, none (0%) of the participants selected ‘Not at all worried’, seven (18%) responded with ‘A little bit worried’, 24 (63%) selected ‘Quite worried’, and seven (18%) selected ‘Extremely worried’. For the ‘Mandy’ vignette, six (16%) of the participants selected ‘Not at all worried’, 20 (53%) responded with ‘A little bit worried’, 12 (32%) selected ‘Quite worried’, and none (0%) of the participants selected ‘Extremely worried’. For the ‘Emily’ vignette, one (3%) of the participants selected ‘Not at all worried’, four (11%) responded with ‘A little bit worried’, 11 (29%) selected ‘Quite worried’, and 22 (58%) selected ‘Extremely worried’.

Another question asked participants to estimate how long it would take each character to feel better. For the ‘Tony’ vignette, none (0%) of the participants selected ‘One or two days’, six (16%) responded with ‘One or two weeks’, 15 (39%) selected ‘One or two months’, and 17 (45%) responded with ‘Longer than a few months’. For the ‘Mandy’ vignette, six (16%) of the participants selected ‘One or two days’, 16 (42%) responded with ‘One or two weeks’, 15 (39%) selected ‘One or two months’, and one (3%) responded with ‘Longer than a few months’. For the ‘Emily’ vignette, five (13%) of the participants selected ‘One or two days’, five (13%) responded with ‘One or two weeks’, 11 (29%) selected ‘One or two months’, and 17 (45%) responded with ‘Longer than a few months’.

Following the three vignettes, participants were asked, “Do you know who to go to for help with emotional difficulties at school?” The majority (89%) of participants responded ‘Yes’, while four (11%) participants responded ‘No’. Another question asked, “Who would you contact if a friend mentions wanting to harm themselves?” The most common response was the participant telling their family or their friend’s family,

followed by a counselor. Other responses included a teacher, a principal/administrator, the police, a vague reference to someone, a doctor, a vague reference to a trusted adult, friends, a therapist, and “the school”. Participants were then asked, “A friend tells you they want to harm themselves, but they don't want you to tell anyone. What would you do?” The majority (60%) of participants said they would tell someone anyway, followed by the participant helping their friend or convincing them to tell someone (29%), contacting a medical professional (4%), telling no one (4%), and calling emergency services (2%). Finally, participants were asked, “Have you ever had an emotional problem that has required any sort of professional help (e.g., counseling)?” Fifteen (39%) participants selected ‘Yes’, while 23 (61%) participants responded with ‘No’.

Discussion

Depression is one of the most common mental health disorders affecting adolescents, and there is evidence suggesting that there are depressed adolescents who are not receiving treatment (Mojtabai, Offson, & Han, 2016). One possible barrier to adolescents receiving treatment is the level of knowledge that they have regarding the symptoms of depression and professionals who are trained to provide treatment. Information regarding adolescents’ knowledge of depression and professional sources of help can aid in promoting and improving mental health awareness efforts and increase adolescents’ knowledge of school-based mental health professionals.

Research Question One

The results of this study indicate that adolescents have a mixed level of knowledge related to depression. A little more than half of participants were able to identify symptoms of depression in the two case studies of Tony (58%) and Emily (61%).

The participants' ability to label Emily's symptoms as depression was comparable to previous studies utilizing the methodology created by Burns and Rapee (2006) (Byrne, Swords, & Nixon, 2015; McCarthy, Bruno, & Fernandes, 2011). Participants' ability to label Tony's symptoms as depression was higher than that of Burns and Rapee, and McCarthy, Bruno, and Fernandes, indicating that these adolescents were able to recognize depression in the absence of the more "obvious" symptoms of suicidal ideation and feelings of worthlessness that were present in Emily's vignette. The fact that none of the participants labeled Mandy's symptoms as depression indicates that adolescents can recognize when their peers are not depressed. Forty-two percent of participants did not think Tony was depressed and 35% did not think Emily was depressed, which could suggest that adolescents may not recognize when their peers are depressed. These participants were more likely to label Tony and Emily as "upset" (56% and 40% respectively), and mentioned specifics about the character's overall situation rather than their emotions or behavior. So, although they were able to recognize that the characters were experiencing emotional difficulties, these adolescents were more cognizant of the character's circumstances instead of their presenting symptoms. In addition, labeling the characters as merely upset may mean that the participants did not think Tony and Emily's symptoms were very serious. In practice, these adolescents may be less likely to seek professional help for themselves or suggest help for their peers.

Research Question Two and Three

Not only is it important to understand whether adolescents can recognize depression in their peers, it is also important to understand what emotional and behavioral symptoms of depression that adolescents consider the most salient. Unsurprisingly,

feelings of worthlessness (33%) and suicidal ideation (27%) were the two most highly quoted symptoms from the 'Emily' vignette, as her vignette contained more emotional symptoms than behavioral symptoms. Adolescents may be more familiar with these symptoms as they are more widely discussed in media and entertainment that adolescents consume. For the 'Tony' vignette, the most highly quoted symptom, diminished interest in previously enjoyed activities (22%), was also an emotional symptom. The next two most highly quoted parts of Tony's story were behavioral symptoms: insomnia and decreased appetite/weight loss (both 19%). Diminished ability to think/concentrate and fatigue/loss of energy were two of the least reported symptoms, which may indicate that adolescents are not as aware that these symptoms are associated with depression. The more that adolescents are aware of and able to recognize symptoms of depression, the more likely it is that they will seek help for themselves and their peers.

Research Question Four

Social relationships increase in importance during adolescents, so knowing whom adolescents recommend their peers seek help from for emotional difficulties is valuable information for improving mental health awareness efforts. One interesting finding from this study was that more participants (84%) responded that Tony needed help from another person than Emily (76%), despite the fact that Emily's vignette contained specific references to suicidal ideation. For all three vignettes, the three most highly recommended sources of help suggested by participants were friends, family, and a counselor. This finding is similar to that of Burns and Rapee (2006), although a counselor was the top recommendation suggested by those adolescents. Adolescents may feel more comfortable confiding in friends and family, as they are typically the parties that

adolescents interact with most in their lives. The emphasis on individuals who are more familiar or accessible to adolescents may explain why a counselor was the most recommended professional source of help, as they may have had more interactions with school counselors or hear about people with emotional difficulties attending counseling. Informal or non-professional sources of help were recommended more than formal or professional sources, which again may be due to the relative accessibility or familiarity adolescents with those groups. However, several of these recommendations were vague, with participants suggesting that the characters seek help from an “adult” or even less specifically “someone”, indicating that some adolescents may not know who to go to for help. Additionally, many of the recommended professional sources of help were also vague, with specific professions such as a psychologist and a psychiatrist outweighed by generic terms like “professional”, “mental health professional”, and “therapist”. These findings may indicate that adolescents have less knowledge about specialized professions.

Curiously, although more participants reported that Tony needed help from another person than Emily, when they were specifically asked whether the characters needed help from a mental health professional, more participants (68%) reported that Emily needed to seek help from a mental health professional than Tony (55%). Of the participants who answered ‘No’ to the question, their reasoning was largely negative. For Tony, participants stated that he was being “overdramatic”, did not have “mental problems” or need “mental help”, and that he would “get over” his situation. For Emily, participants state that she “made a mistake”, was being “overdramatic”, and only needed to talk to friends or family. These statements further suggest that some adolescents were

focused on specific aspects of Tony and Emily's situations rather than on their presenting symptoms, and that these participants underestimated the severity of the characters' symptoms.

Participants' ratings of the helpfulness of a list of ten individuals is harder to interpret. Responses varied by participant for each individual, and may reflect some confusion on the part of the participants on how to operate the sliding scale on the Qualtrics platform. The data that is available in some ways mirrors the participants' recommendations for sources of help. Friends and family were among the top three highest rated individuals for all three characters. In contrast to the participants' open-ended suggestions, a doctor was the second highest rated individual for Emily and a school psychologist was the second highest rated individual for Tony.

The variety in participant responses to the questions related to help seeking may be in part because of the different ways in which the questions were being asked. However, overall themes that emerged are that adolescents are more likely to regard informal sources of help as highly or even higher than professional sources. In addition, familiarity with or availability of the helping source may increase the likelihood that adolescents will recommend the helping source to their peers. Although informal sources like family and friends can be helpful supports for adolescent experiencing depression, these finding suggest that adolescents may benefit from more knowledge about professional sources of help that can provide effective treatment.

Research Question Five

Mental health literacy, as defined by Jorm and colleagues (1997), includes knowledge of professional help available. This study aimed to explore adolescents'

knowledge of school-based mental health professionals, as these professionals are the most accessible to adolescents while at school. As expected, very few participants knew the identity of their school psychologist, school social worker, and school nurse (3%, 3%, and 11% respectively). As ninth grade students, participants may not have had the opportunity to learn who these individuals are or have need of their support. However, this finding also highlights the relative invisibility of these professionals. Participants were more aware of the identity of their assigned school counselor (61%), which reflects the larger visibility of school counselors in American public schools. Additionally, participants reported having greater knowledge of how school counselors can help students compared to school nurses, psychologists, and social workers, which again may reflect the relative familiarity adolescents have with school counselors. Examining the results of the perceived duties of the school-based mental health professionals as reported by participants provides further evidence that adolescents do not possess much knowledge about the roles of school-based mental health professionals. Many of the responses for all four professions referenced the professionals “helping” students, indicating that adolescents are not as aware of the type of help that is available. Further, the most highly reported response for perceived duties of the school psychologist and school social worker was that participants did not have knowledge of what these professionals do or that their high school had an assigned psychologist and social worker. These findings suggest that adolescents may rely on seeking help from informal sources because they are not aware of the professional sources that are available to them at school, and again highlights the need for increasing adolescents’ knowledge of professionals who can provide treatment.

Additional Survey Questions

Additional questions were included in the survey that were either part of the Burns and Rapee (2006) version of the *Friend in Need Questionnaire*, examined participants' personal help-seeking behaviors, or related to participants' help-giving behaviors. Two questions from the original article asked participants to report how worried they were about each character, and to estimate how long it would take each character to recover from their situation. The majority of participants responded that they were "extremely worried" (58%) about Emily, "quite worried" (63%) about Tony, and "not at all worried" (53%) about Mandy, indicating that participants were more worried about the depressed characters. Similarly, participants were more likely to select the longer time periods to report how long it would take Emily and Tony to recover and the shorter time periods to report how long it would take Mandy to recover, indicating that participants recognized that Tony and Emily's symptoms were more severe than Mandy's symptoms.

Participants' response to the question about knowing who to go to for help with emotional difficulties while at school suggests that they feel confident about being able to find a source of help. A follow up question of whom that would be was not asked, so it is unclear whom participants would personally choose to go to for help. Similar to their open-ended suggestions about sources of help for the case vignette characters, family members (the participants' or their friend's), friends, or a counselor were the three most highly reported sources of help that participants would seek out to help a friend who said they want to harm themselves. Additionally, the majority (60%) of participants reported that they would get help from someone if a peer said they want to harm themselves, even

if the peer told the participants to stay silent. This is a very positive finding, and indicates that adolescents have a high regard for the wellbeing of their friends.

Limitations and Considerations for Future Research

There are a number of limitations to this research. First, the level of participation was low, which is reflective of the challenges of conducting school-based research. The students who participated may not reflect the knowledge and opinions of all ninth grade students in that particular high school or the entire school district. Second, participation was limited to ninth grade students due to the relative ease at accessing these students due to the required Physical Education/Health course. Originally, tenth grade students were the targeted grade level for this study, as they too are required to take a Physical Education/Health course. However, the participating school district began implementing a suicide prevention program with seventh and tenth grade students during the same academic year. Although extremely beneficial, the knowledge gained by students as a result of participating in the program was considered a potential confounding factor to the current research. In the future, students could be surveyed before and after participating in suicide prevention programs to explore whether these types of interventions increase adolescents' knowledge of depression and help-seeking behaviors. In addition, adolescents in eleventh and twelfth grade could be surveyed to provide a range of responses. Third, the majority of research on mental health literacy to date has utilized brief case scenarios, and the generalization between these vignettes and what adolescents actually experience is unclear (Burns and Rapee, 2006). More naturalistic research methodologies like interview protocols or scripted videos could be developed to tap into

the unique factors that could determine how adolescents view and respond to real-life problems.

Implications for School Psychologists

One of the main findings from this study that affects school psychologists is that adolescents do not appear to possess much knowledge relating to school psychologists' presence in high schools or how school psychologists can help students experiencing emotional distress. This is particularly troubling considering that some of the major roles of school psychologists at the secondary level are to provide counseling services, interventions, consultation, and crisis support. School psychologists have many responsibilities, and are often spread thin supporting multiple schools. However, it is imperative that school psychologists increase their visibility at the secondary level where their training in providing mental health services is greatly needed. Results from this study indicate that adolescents' ability to identify depression from brief case vignettes is slightly better than chance. Furthermore, there were also participants who merely labelled the depressed characters as "upset", thus underestimating the severity of the characters' symptoms. In addition, participants were less likely to recognize less "obvious" symptoms of depression like fatigue or diminished ability to think/concentrate, and more likely to recommend informal sources of help such as friends or family. School psychologists are well equipped to provide psychoeducation to adolescents about depression, or advocate at the district level regarding beneficial information that can be included in health education curriculum about mental health disorders.

Appendix A

Modified Friend in Need Questionnaire

Being a good friend involves knowing when our friends are upset. Would you know when your friends are going through a really hard time? Or, would you know when or where your friends should get help about their problems? This questionnaire contains a brief description of 3 young people. Your job is to read each description and then decide whether you think that this person has a serious problem, and if so, what they should do about it. There are no right or wrong answers – we just want to get some different points of view about what different people would think and do. The questionnaire is completely anonymous, and you are not required to provide any information that individually identifies you. Before we start, we need a few details about you.

1. What school do you attend?
2. What grade are you in?
 - a. 9th
 - b. 10th
 - c. 11th
 - d. 12th
3. Gender
 - a. Male
 - b. Female
4. Race/Ethnicity
 - a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Hispanic/Latino
 - e. Native Hawaiian or Pacific Islander
 - f. White
 - g. Two or More Races

Tony is in 9th grade. His parents recently separated after an extended period of fighting. Tony's school counselor called a meeting with his mother to discuss his school progress. Over the past 9 months there had been deterioration in Tony's school grades, and he was often late getting to school. Tony explained that he had been feeling constantly tired lately, and was finding it difficult to get to sleep at nights – that was why he was not able to get out of bed in the mornings. His mother said that she thought he was just not eating enough – in fact she thought he had lost quite a bit of weight over the last few months. In relation to his school grades, Tony said that although he wanted to do well, he found that he just couldn't concentrate or think as well as before. The guidance counselor said he thought it would be good for Tony to start playing in the school soccer team again, as he had always enjoyed it so much. Tony said that he just wasn't interested in soccer or anything too much lately.

5. If Tony was your friend, how worried would you be about his overall emotional well-being?
 - a. I would not be at all worried about his emotional well-being
 - b. I would be a little bit worried about his emotional well-being
 - c. I would be quite worried about his emotional well-being
 - d. I would be extremely worried about his emotional well-being
6. In five words or less, what do you think is the matter with Tony?

7. Which parts of Tony’s story are the strongest hints to you that he might be experiencing emotional difficulties? (Please quote the words from the scenarios that are the strongest hints.)
8. How long do you think it will take for Tony to feel better again?
 - a. One or two days
 - b. One or two weeks
 - c. One or two months
 - d. Longer than a few months
9. Do you think Tony needs help from another person to cope with his problems?
 - a. Yes
 - b. No
 - c. Don't Know
10. If yes, who do you think he needs help from?
11. Do you think Tony needs to seek help from a mental health professional? (A mental health professional is a health care practitioner or community services provider who offers services for the purpose of improving an individual's mental health or to treat mental disorders)
 - a. Yes
 - i. Why?
 - b. No
 - i. Why not?
 - c. Don't Know

Mandy is in 11th grade. She is a good student, a member of the basketball team, and hopes to work as a travel agent once she leaves high school. She has had a number of boyfriends over the past 2 years. Four days ago Daniel, her boyfriend of 8 months, broke up with her. Daniel told Mandy that he had met another girl who he liked more than her. She has been a wreck for the past 3 days – she is crying all the time and can’t concentrate on her schoolwork. She keeps asking her friends “What is wrong with me that Daniel doesn’t love me anymore?” She said she doesn’t think she can ever go out with another boy again. She is especially upset because she and Daniel had been planning to go to the Homecoming dance together and she won’t have anyone to go with.

12. If Mandy was your friend, how worried would you be about her overall emotional well-being?
 - a. I would not be at all worried about her emotional well-being
 - b. I would be a little bit worried about her emotional well-being
 - c. I would be quite worried about her emotional well-being
 - d. I would be extremely worried about her emotional well-being
13. In five words or less, what do you think is the matter with Mandy?
14. Which parts of Mandy’s story are the strongest hints to you that she might be experiencing emotional difficulties? (Please quote the words from the scenarios that are the strongest hints.)
15. How long do you think it will take for Mandy to feel better again?
 - a. One or two days
 - b. One or two weeks
 - c. One or two months
 - d. Longer than a few months
16. Do you think Mandy needs help from another person to cope with her problems?
 - a. Yes
 - b. No
 - c. Don't Know

17. If yes, who do you think she needs help from?
18. Do you think Mandy needs to seek help from a mental health professional? (A mental health professional is a health care practitioner or community services provider who offers services for the purpose of improving an individual's mental health or to treat mental disorders)
 - a. Yes
 - i. Why?
 - b. No
 - i. Why not?
 - c. Don't Know

Emily is in 12th grade. She and her friend, Amy, have been planning to go on a week-long cruise with a group of other girls and boys from their local area after they graduate. Amy and Emily had been planning their trip since Emily's older sister had graduated 2 years ago and gone on a cruise to the Bahamas. Lately, however, Amy had noticed that Emily hadn't been so excited about the trip – in fact, she had noticed that over the past month, or maybe longer, Emily hadn't been very interested in anything very much, had lost her characteristic spark and energy, and regularly appeared to be sad and tearful. To make matters worse, Emily had forgotten to call the travel agent on the allocated day to confirm their tickets, and had cost them both an extra \$50 in failed 'confirmation fees'. Emily was very apologetic to Amy, but nothing Amy said seemed to cheer Emily up. Emily just kept saying that she was 'useless' and 'good for nothing', and that 'she might as well just be dead because no-one would care if she wasn't here anymore'.

19. If Emily was your friend, how worried would you be about her overall emotional well-being?
 - a. I would not be at all worried about her emotional well-being
 - b. I would be a little bit worried about her emotional well-being
 - c. I would be quite worried about her emotional well-being
 - d. I would be extremely worried about her emotional well-being
20. In five words or less, what do you think is the matter with Emily?
21. Which parts of Emily's story are the strongest hints to you that she might be experiencing emotional difficulties? (Please quote the words from the scenarios that are the strongest hints.)
22. How long do you think it will take for Emily to feel better again?
 - a. One or two days
 - b. One or two weeks
 - c. One or two months
 - d. Longer than a few months
23. Do you think Emily needs help from another person to cope with her problems?
 - a. Yes
 - b. No
 - c. Don't Know
24. If yes, who do you think she needs help from?
25. Do you think Emily needs to seek help from a mental health professional? (A mental health professional is a health care practitioner or community services provider who offers services for the purpose of improving an individual's mental health or to treat mental disorders)
 - a. Yes
 - i. Why?
 - b. No
 - ii. Why not?

- c. Don't Know
26. Think back to the story you read about Tony, the young man who was having trouble with his grades, had poor sleep habits and appetite, and was no longer interested in his hobbies. Earlier you listed a person who you thought could help Tony. In addition to the person you picked, some people may want to seek help from another source. Rate this list of individuals from 1 to 5, with 5 being the most qualified to help Tony with his problems and 1 being the least helpful.
- Doctor
 - Tony's Family Member
 - Friend
 - Principal
 - Clergymember
 - School Counselor
 - School Nurse
 - School Psychologist
 - School Social Worker
 - Teacher
27. Think back to the story you read about Mandy, the young woman who was upset after breaking up with her boyfriend. Earlier, you listed a person who you thought could help Mandy. In addition to the person you picked, some people may want to seek help from another source. Rate this list of individuals from 1 to 5, with 5 being the most qualified to help Mandy with her problems and 1 being the least helpful.
- Doctor
 - Mandy's Family Member
 - Friend
 - Principal
 - Clergymember
 - School Counselor
 - School Nurse
 - School Psychologist
 - School Social Worker
 - Teacher
28. Think back to the story you read about Emily, the young woman who had recently appeared sad and tearful a lot of the time, lost interest in going on a cruise with her friends, and said she was "useless" and that "no-one would care if she wasn't here anymore". Earlier, you listed a person who you thought could help Emily. In addition to the person you picked, some people may want to seek help from another source. Rate this list of individuals from 1 to 5, with 5 being the most qualified to help Emily with her problems and 1 being the least helpful.
- Doctor
 - Emily's Family Member
 - Friend
 - Principal
 - Clergymember
 - School Counselor
 - School Nurse
 - School Psychologist
 - School Social Worker
 - Teacher
29. Do you know who to go to for help with emotional difficulties at school?

- a. Yes
 - b. No
30. Who would you contact if a friend mentions wanting to harm themselves?
31. A friend tells you they want to harm themselves, but they don't want you to tell anyone. What would you do?
32. Do you know who your school counselor is at your school?
- a. Yes
 - i. What is their name?
 - b. No
33. How well do you understand how the school counselor can help students with emotional difficulties?
- a. Extremely well
 - b. Very well
 - c. Moderately well
 - d. Slightly well
 - e. Not well at all
34. List at least two things that you think the school counselor does.
35. Do you know who the school nurse is at your school?
- a. Yes
 - i. What is their name?
 - b. No
36. How well do you understand how the school nurse can help students with emotional difficulties?
- a. Extremely well
 - b. Very well
 - c. Moderately well
 - d. Slightly well
 - e. Not well at all
37. List at least two things that you think the school nurse does.
38. Do you know who the school psychologist is at your school?
- a. Yes
 - i. What is their name?
 - b. No
39. How well do you understand how the school psychologist can help students with emotional difficulties?
- a. Extremely well
 - b. Very well
 - c. Moderately well
 - d. Slightly well
 - e. Not well at all
40. List at least two things that you think the school psychologist does.
41. Do you know who the school social worker is at your school?
- a. Yes
 - i. What is their name?
 - b. No
42. How well do you understand how the school social worker can help students with emotional difficulties?
- a. Extremely well
 - b. Very well
 - c. Moderately well
 - d. Slightly well

- e. Not well at all
43. List at least two things that you think the school social worker does.
44. Have you ever had an emotional problem that has required any sort of professional help (e.g., counseling)?
- a. Yes
 - b. No

Appendix B

Information Letter

Dear Parent/Guardian:

My name is Jessica Meeks and I am a third year graduate student at James Madison University's School Psychology Program, and currently working as a School Psychologist Intern for XXX Public Schools. I am working on my graduate thesis research study, investigating high school students' knowledge of mental health disorders and school-based mental health professionals. Your child is being asked to participate in my study, which consists of an online survey. The survey should only take about 20 minutes of your child's time. Your child's responses will be kept confidential, and no identifying information will be collected by the survey. Attached to this letter are two copies of a parent/guardian consent form containing more information about the study. Should you decide to let your child participate in my study, please read, sign, and return one of the consent forms in the enclosed envelope. You may keep the second consent form for your records.

Your child's participation in my study will help to further the knowledge surrounding mental health awareness and prevention efforts in public schools. I hope you will consider allowing your child to participate in this important research.

Sincerely,

Jessica Meeks, M.A.
Educational Specialist (Ed.S.) Candidate,
James Madison University
School Psychologist Intern,
XXX Public Schools

Appendix C

Parent/Guardian Informed Consent

Identification of Investigators & Purpose of Study

Your child is being asked to participate in a research study conducted by Jessica Meeks from James Madison University. The purpose of this study is to investigate adolescents' ability to identify mental health disorders and their knowledge of school-based mental health professionals. This study will contribute to the researcher's completion of her educational specialist's thesis.

Research Procedures

Should you decide to allow your child to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of a survey that will be administered to individual participants via computer in their classroom. Your child will be asked to complete a questionnaire related to his/her ability to identify mental health disorders and his/her knowledge of school-based mental health professionals.

Time Required

Participation in this study will require 20 minutes of your child's time.

Risks

The investigator does not perceive more than minimal risks from your child's involvement in this study (that is, no risks beyond the risks associated with everyday life). Your child will be encouraged to contact their school counselor or school psychologist if they feel strongly about the survey content. You or your child may contact the investigator at any time with questions about the study.

Benefits

There may be no personal benefit from your child's participation in this study. However, the knowledge gained in the course of this study may be of value to researchers and educators.

Payment for participation

Your child will not receive payment for taking part in the study.

Confidentiality

The results of this research will be presented at a conference. Your child will be identified in the research records by a code name or number. The researcher retains the right to use and publish non-identifiable data. When the results of this research are published or discussed in conferences, no information will be included that would reveal your child's identity. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed.

There is one exception to confidentiality we need to make you aware of. In certain research studies, it is our ethical responsibility to report situations of child abuse, child neglect, or any life-threatening situation to appropriate authorities. However, we are not seeking this type of information in our study nor will you be asked questions about these issues.

Participation & Withdrawal

Your child’s participation is entirely voluntary. He/she is free to choose not to participate. Should you and your child choose to participate, he/she can withdraw at any time without consequences of any kind. However, once your child submits their answers, they will no longer be able to withdraw since the survey is anonymous.

Questions about the Study

If you have questions or concerns during the time of your child’s participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Jessica Meeks
 Department of Graduate Psychology
 James Madison University
 Email: meeks2ja@dukes.jmu.edu

Deborah Kipps-Vaughan
 Department of Graduate Psychology
 James Madison University
 Telephone: (540) 568-4557
 Email: kippsvdx@jmu.edu

Questions about Your Rights as a Research Subject

Dr. David Cockley
 Chair, Institutional Review Board
 James Madison University
 (540) 568-2834
 cocklede@jmu.edu

Giving of Consent

I have read this consent form and I understand what is being requested of my child as a participant in this study. I freely consent for my child to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

 Name of Child (Printed)

 Name of Parent/Guardian (Printed)

 Name of Parent/Guardian (Signed)

 Date

 Name of Researcher (Signed)

 Date

Appendix D

YOUTH ASSENT FORM (Ages 13-17)

HELPING A FRIEND WHO IS UPSET

We are inviting you to participate in this study because we are interested in how you would help your friends if they are upset. Would you know when your friends are going through a really hard time? Or, would you know when or where your friends should get help about their problems? This survey will take you about 20 minutes to do.

This survey contains a brief description of three young people. Your job is to read each description and then decide whether you think that this person has a problem, and if so, what they should do about it. There are no right or wrong answers – we just want to get some different points of view about what different people would think and do.

You may identify with the stories of one or more of the characters. After you finish the survey, you will be able to give the researcher feedback about your experience. The primary reason for doing this survey is to understand high school students’ knowledge about health and wellbeing.

The survey is completely anonymous, and you are not required to provide any information that individually identifies you.

You may refuse to participate without consequences of any kind. You can withdraw from participating in the survey at any time without consequences.

We have asked your parents for their permission for you to do this study.

If you have any questions at any time, please ask the researcher. If you feel strongly about the content of the survey, please contact your school counselor or school psychologist.

If you check "yes," it means that you have decided to participate and have read everything that is on this form. You and your parents will be given a copy of this form to keep.

_____ Yes, I would like to participate in the study.

Signature of Subject

Date

Signature of Investigator

Date

Jessica Meeks

Department of Graduate Psychology
James Madison University
Email: meeks2ja@dukes.jmu.edu

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