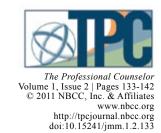
Evaluating Mental Health Literacy and Adolescent Depression: What Do Teenagers "Know?"



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The prevalence of depression increases markedly during adolescence, yet many youth are not receiving the support that they need. One factor that has been speculated as contributing to low rates of care is a lack of mental health literacy about depression and viable sources of support. This pilot study focused on mental health literacy as it relates to adolescent depression and suicidality and represented a pseudo-replication of Burns and Rapee (2006). Overall, participants (*N*=36) in this study were able to differentiate depressed vignettes from non-depressed vignettes and identify common symptoms of depression in their assessments. Also, sources of optimal help identified by participants varied upon the perceived degree of seriousness of the difficulties. Such results offer implications regarding the potential benefit of including adolescents in a more direct way when providing outreach or offering services.

Keywords: adolescents, mental health literacy, depression, suicidality, support

Depression in adolescence is of particular relevance, as it can continue into adulthood yet often goes undiagnosed and untreated (Wagner, Emslie, Kowatch, & Weller, 2008). According to the *Diagnostic and Statistical Manual of Mental Disorders-Text Revision* (*DSM-IV-TR*) (APA, 2000), the diagnostic criteria and duration mirror adult depression in many respects. As in adult depression, adolescent depression can include a variety of symptoms, at least one of which must be either depressed mood or loss of pleasure/interest. Furthermore, the *DSM-IV-TR* stipulates that, if depressed mood is chosen, it may be substituted by irritable mood in adolescents.

The rate of depression increases six-fold between the ages of 15–18 (Hankin, 2006). Approximately eight percent of teenagers—an estimated two million youth from 12–17 years of age—suffered at least one major depressive episode in 2007. Only 39% received some form of treatment for depression in the preceding 12 months. The rate of receiving professional help was much lower among those youth without health insurance (17%). Among all teenagers who obtained treatment, over half (59%) saw a counselor for assistance with their depression. Nearly 37% and 27% of youths saw a psychologist or general practitioner/family doctor, respectively (Substance Abuse and Mental Health Services Administration, 2009).

Given the prevalence of mental illness and its impact on society, it is no surprise that there is a growing interest in *mental health literacy*, a term first used by Jorm et al. (1997). Defined as the "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (p. 182), mental health literacy also includes knowledge about treatment and from whom to seek help. It has been found, for instance, that family and friends can be vital in the recognition of depressive symptoms (Langlands, Jorm, Kelly, & Kitchener, 2008a). However, Highet, Thompson, and McNair (2005) saw that family members usually recognized symptoms of the individual in hindsight. The general public often does not possess the knowledge base to help someone who is developing a psychotic illness (Langlands, Jorm, Kelly, & Kitchener, 2008b). Kitchener and Jorm (2002) found that individuals who took part in their Mental Health First Aid course showed improvement in recognizing disorders, and their views about treatment of disorders became more in line with those of professionals in the mental health field. In addition, the course reduced their stigma attached to mental disorders, increased their feelings of confidence in providing help, and increased the help provided to others.

Few studies have been conducted on younger populations and mental health literacy. Burns and Rapee (2006) noted, "While there is growing literature on the mental health literacy of adults, to date there has not been a parallel interest in

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the mental health literacy of young people" (p. 227). Wright et al. (2005) looked at young adults' (ages 12 to 25) ability to pinpoint depression and psychosis and their recommendations for help to be sought. Nearly half of the participants were able to label the depressed vignette as depressed, but only a quarter of participants were able to label psychosis. People who were given the depressed vignette were less likely to choose a correct form of treatment than those given the psychosis vignette. Psychologists and psychiatrists were recommended more frequently for the psychosis vignette than for the depressed vignette, and a family doctor or general practitioner was chosen more often for the depressed vignette than for the psychosis vignette.

Adolescents have been found more likely to consider themselves "very confident" (Jorm, Wright, & Morgan, 2007a, p. 67) to help a peer in need with girls rating themselves as more confident than boys. In addition, across vignettes, confidence in providing help to a peer with a problem was higher for depression (without alcohol misuse) and social phobia than for psychosis and depression with alcohol misuse (Jorm et al, 2007a).

Jorm, Wright, & Morgan (2007b) found differences among Australian youth in the type of help sought for mental disorders. Participants were read vignettes describing youth of similar ages who were experiencing various disorders, then were asked a series of questions that included where they would turn with similar problems. For the vignette describing a teen suffering from depression, adolescents aged 12–17 chose family (54%) most often as a source of help and opted for mental health professional or service most infrequently (2%). Nearly one-third of young adults ages 18–25 selected family (31%) or a general practitioner/medical doctor (31%) on a similar vignette regarding depression. Overall the perceived barriers to help-seeking were personal in nature and did not relate to systemic characteristics, as they noted, "For young people, it is embarrassment or concern about what others think..." (p. 559).

Burns and Rapee (2006) used a vignette-based approach to measure mental health literacy among high school students in Australia. In their study, they utilized the *Friend In Need* questionnaire, created by the authors for that specific study. This instrument offers five short vignettes of teenage students, two of whom ("Tony" and "Emily") represented youth meant to be clinically depressed. One of the two vignettes ("Emily") offered a reference to suicidal ideation. The remaining three vignettes were of students facing difficulties, though were not intended to reflect depression.

They found that over two-thirds of participants (68%) accurately labeled "Emily" as depressed, while about one-third (34%) recognized "Tony" as depressed. Female participants were more likely to make a depressed diagnosis in both the "Tony" and "Emily" vignettes than the male participants. Female participants also showed more worry for the depressed vignettes than male participants. Among help-seeking sources, counselors were chosen most often for the helpers of the depressed teens, and this category was followed by friends and family/relatives.

To our knowledge, no study has been conducted on the mental health literacy of U.S. teens as it pertains to adolescent depression. With this point in mind, the current study represents a replication of Burns and Rapee (2006) and offers an initial sample involving older adolescents' perspectives in the assessment, recovery time, and help-seeking recommendations regarding depression. Our central study questions were consistent with Burns and Rapee and the questions posed by the *Friend in Need* Questionnaire.

Procedures

Both prior to and after receiving approval by the university's institutional review board, two of the authors met with the principal of the school where the data was collected. It was determined that eight sections of the school's psychology and anthropology classes would be appropriate to the topic of study and ages of interest, and the primary author contacted the teachers and shared the following information with them: the parental/guardian consent form, the student consent form, details concerning the data collection process, and pertinent dates of the consent form deadlines and actual administration of the instrument used in this study. Teachers distributed the consent forms to students, who, if interested in possibly participating in the study, took them to their parents/guardians. Signed parental/guardian consent must have been completed and returned to the teachers in a four-day time period, which occurred prior to the date of the administration of the instrument. In both the parental/guardian and participant consent forms, it was made clear that the questionnaire was not a formal test and would take an estimated 25–40 minutes to complete.

On the day of the data collection, one of the two primary authors (JM and MB) went to the classroom, collected the completed parental/guardian consent form, read an abbreviated student consent form to the potential participants after giving a hard copy to them, and asked for questions at the conclusion. Students with unsigned parental/guardian consent forms were given an alternate class assignment, while those students who consented to be in the study completed the *Friend in Need* Questionnaire. No extra credit was granted for participation in the study. Participants completed the questionnaire in their classrooms. In a few instances, participants and the author/administrator were asked to move to a nearby vacant room for the data collection.

Approximately five classes were visited for data collection, and a total of 36 students, 21 of whom were young men, participated in the study. Most participants completed the questionnaire in approximately 20 minutes. The questionnaires were completed in an anonymous manner. In the coding process, a number was given to each questionnaire for tracking purposes only. Finally, the two authors also offered to return to the class after the data administration to further discuss the study; however, no teachers chose this option.

Instrument

Adolescents' mental health literacy was assessed using the *Friend in Need* Questionnaire (Burns & Rapee, 2006). As previously described, the questionnaire presents five vignettes of young people experiencing various difficulties and solicits both close-ended and open-ended responses from participants. Specifically, participants are instructed to read each vignette and respond to the following general questions: (a) How worried would you be about the person's overall emotional well-being? (b) What do you think is the problem of the person? (c) What aspects of the vignette provided the strongest hints that the person was having difficulties? (d) How long will it take this adolescent to feel better? and (e) Does this person need help from others to cope with his/her problems? The final question also has a supplemental, openended question regarding who the helper would be. The respondents are posed with all of these questions for each of the five vignettes. The complete *Friend in Need* Questionnaire can be found in Burns and Rapee (2006).

A coding system was devised for the open-ended responses, specifically on the responses asking about the youth's problem, aspects of the vignette that provided hints, and the appropriate helper. For the question concerning the youth's problem, the responses were filtered into two categories: "depressed" or "not depressed." To qualify as "depressed," the respondents needed to write the words "depressed/depression" or "suicide/suicidal." Any other problems listed were considered to be "not depressed." On the question regarding hints of the problem in the vignette, the coder was looking for responses that fit into diagnostic criteria for depression. The two depressed vignettes each had five diagnostic criteria imbedded in them, and this question tried to tease out whether respondents could identify these key criteria. Hence, the responses were categorized into the five diagnostic criteria of each vignette, with other responses not qualifying. The question that asked about the appropriate helper was split into nine possible categories of helpers. A few respondents, whose answers occurred rarely, were not included in the analyses.

Results

The findings are described in order of the items presented in the *Friend in Need* Questionnaire. The first question assessed whether adolescents could label a cluster of depressive symptoms in a case vignette as depressed. Respondents were asked, "What do you think is the matter with [name]?" This open-ended question elicited a variety of responses from respondents. Only responses that included "depressed," "depression," "suicide," or "suicidal" were coded as a label of depression. In reviewing the responses to the two vignettes concerning students (Tony and Emily) depicted as depressed, it was evident that the majority of participants accurately labeled the vignettes, as 75% accurately identified Emily as depressed and 58% accurately labeled Tony as depressed.

The majority of respondents also accurately identified the non-depressed vignettes as such. Specifically, over 94% of respondents accurately identified Mandy as not being depressed. All participants (100%) accurately identified Jade as non-depressed, and over 97% accurately identified Nick as not being depressed. Frequencies of depressive codes for all vignettes are included in Table 1. Separate chi-square analyses were conducted to examine any differences in ratings of each vignette between male and female participants. Results indicated that no such differences exist on any of the five vignettes.

Table 1Gender and Ratings of Vignette as Depressed

Total N	Male N	Female N	Chi Square (X ²) for gender difference
^a Emily	27 (75%)	14 (66.7%)	13 (86.7%)
^a Tony	21 (58.3%)	11 (52.4%)	10 (66.7%)
Nick	1 (2.8%)	1 (4.8%)	0 (0%)
Mandy	0 (0%)	0 (0%)	0 (0%)
Jade	0 (0%)	0 (0%)	0 (0%)
Jade	0 (0%)	0 (0%)	0 (0%)

Note: Percentages appear in parentheses after frequencies.

Second, in regard to respondents expressing greater worry for youth in the depressed vignettes versus the non-depressed vignettes, the *Friend in Need* Questionnaire instructed participants to rate their concern on a five-point scale with higher scores indicating more worry. The scores for the depressed vignettes (Emily and Tony) and non-depressed vignettes (Mandy, Jade, and Nick) were collapsed to produce mean scores of level of worry. A general linear model was used to compare sex differences (participant) in the intensity of worry scores for depressed and non-depressed vignettes. Results indicate that no significant differences existed between male (M = 3.40, SD = .38) and female participants (M = 3.45, SD = .33) regarding ratings of worry for the depressed (p < .58). No significant differences were found regarding male (M = 1.80, SD = .41) and female participants' (M = 1.81, SD = .39) ratings of worry of the non-depressed vignettes either (p < .82).

The third question pertained to the length of recovery in the depressed and non-depressed vignettes. The respondents rated each vignette on the perceived length of time it would take the character to feel better on a four-point Likert scale from 1 (one or two days) to 4 (longer than a few months). Higher scores indicate a perception that more time is needed to feel better. Despite the use of a Likert scale, some respondents chose two answers or marked in between two options. When this occurred, the score was adjusted to reflect an average. For example, if someone circled, both "3" and "4," a score of "3.5" was entered. This decision was made to maintain as many respondents as possible, given the small number of the sample. Overall, the respondents rated the depressed vignettes with a mean score of 3.67 (SD = .37), which indicates a recovery period of between "one or two months" and "longer than a few months." This finding compared to a lower mean score of 1.97 (one or two days, SD = .45) for the non-depressed vignettes. Scores on the two depressed vignettes and scores on the three non-depressed vignettes were collapsed to create a composite mean score of recovery time for depressed (dependent variable) versus non-depressed vignettes (dependent variable).

A two-way MANOVA was conducted to determine if sex differences (of respondents) made a difference in the length of the recovery for both scenarios (depressed versus non-depressed). The overall model was statistically significant for the recovery time between the depressed and non-depressed vignettes F(1, 34) = 651.31; p = .01. The MANOVA did not reveal a significant interaction between participant gender and recovery time of vignettes (p < .27). Female respondents rated both the depressed vignettes (M = 3.82, SD = 24) and non-depressed vignettes (M = 2.03, SD = .43) higher than male respondents who rated the vignettes as 3.57 (SD = .53) and 1.93 (SD = .47) respectively, but this difference was not statistically significant.

Fourth, participants were asked to identify the elements of the vignette that demonstrated whether the fictitious teens were having emotional troubles. The two depressed vignettes (Emily and Tony) contained criteria of a Major Depressive Episode as described in the *DSM-IV-TR* (APA, 2000). In the case of Emily, respondents readily identified indicators of suicide (91%) and self-worth (72%). Respondents were less likely to identify symptoms of loss of interest (19%), fatigue (22%), and mood (19%) in this case. (See Table 2 for more complete results.) In the case of Tony, a majority of respondents identified loss of interest (75%) and weight loss (58%). Respondents were less likely to identify Tony's fatigue (44%), insomnia (39%), and diminished ability to think or concentrate (39%).

^a = depressed vignette

 Table 2

 Identified Symptoms of Distress for the Two Depressed Vignettes by Sex

Symptoms	Percentage total (N)	Percentage male (N)	Percentage female (N)	\mathbf{x}^2
	Tony			
Fatigue/loss of energy	16 (44.4%)	8 (38.1%)	8 (53.3%)	.36
Insomnia	14 (38.9%)	9 (42.9%)	5 (33.3%)	.51
Weight loss/decreased appetite	21 (58.3%)	13 (61.9%)	8 (53.3%)	.61
Diminished ability to think	14 (38.9%)	7 (33.3%)	7 (46.7%)	.42
Diminished interest in activities	27 (75%)	18 (85.7%)	9 (60%)	.08
	<u>Emily</u>			
Diminished interest in activities	7 (19.4%)	5 (23.8%)	2 (13.3%)	.67
Fatigue/loss of energy	8 (22.2%)	5 (23.8%)	3 (30%)	.78
Depressed mood (sad/tearful)	7 (19.4%)	3 (14.3%)	4 (26.7%)	.35
Feelings of worthlessness	26 (72.2%)	16 (76.2%)	10 (66.7%)	.53
Suicidal thoughts	33 (91.7%)	10 (90.5%)	14 (93.3%)	.76

Note. Significant differences between male and female (p < .05) on x^2 analysis.

Finally, after noting which symptoms were strong indicators of problems, respondents answered an open-ended question about sources of help to aid the person in the vignette. For all five vignettes, participants answered whether they thought the person in the vignette needed help from another person. The options included "no," "yes," or "don't know." If the respondents endorsed that the person did need help, they were asked to answer a follow-up question indicating who they think should help the person. For the depressed vignettes, 58% of respondents indicated that Tony needed help, and 75% indicated the same for Emily.

In regard to the type of helpers, participants' responses were broken down into nine categories of helpers, including counselor; friends; family; professional; psychologist; psychiatrist; doctor; teacher; and someone who has had the same difficulty. Some coding decisions included how to categorize responses not explicitly in the list. Some of these included counseling, school counselor, and guidance counselor, which were included in the category of counselor. For the friend category, other responses included "peers" and "someone who knows him/her well." For family, "parents," "relatives," "siblings/brother/sister" also were included. Non-specific terms were included in the professional category, including specialist, shrink, therapist, psychotherapist, and family therapist. Other responses included in the psychiatrist category were "doctor for depression/depressed kids" and "doctor who prescribes antidepressants." Some responses that were not coded included third party, new people, anyone, role model, someone he/she doesn't know, and everyone.

Nearly half of the participants (47%) identified the family as the suggested primary helper for Tony, while over one-third (36%) of participants suggested a counselor. The same percentage (36%) identified the family and a psychiatrist, respectively, for Emily, as the best sources of help (see Tables 3-4 for more complete results).

 Table 3

 Recommended Source of Help for Tony

Help Source	Total <i>N</i> (percentage)	Male <i>N</i> (percentage)	Female <i>N</i> (percentage)	\mathbf{x}^2
Counselor	13 (36.1)	7 (33.3)	6(40)	.68
Friends	11 (30.6%)	5 (23.8)	6 (40)	.46
Family	17 (47.2)	10 (47.6)	7 (46.7)	.95
Professional	11 (30.6)	5 (23.8)	6 (40)	.46
Psychologist	7 (19.4)	3 (14.3)	4 (26.7)	.42
Psychiatrist	2 (5.6)	2 (9.5)	0 (0)	.50
Teacher	1 (2.8)	1 (4.8)	0 (0)	1.00
Someone w/ same experience	1 (2.8)	0 (0)	1 (6.7)	.42
Doctor	36 (100)	21 (100)	15 (100)	n/a

 Table 4

 Recommended Source of Help for Emily

Help Source	Total <i>N</i> (percentage)	Male <i>N</i> (percentage)	Female <i>N</i> (percentage)	\mathbf{x}^2
Counselor	6 (16.7)	4 (19)	2 (13.3)	1.0
Friends	12 (33.3)	8 (38.1)	4 (26.7)	.47
Family	13 (36.1)	7 (33.3)	6 (40)	.68
Professional	9 (25)	5 (23.8)	4 (26.7)	1.0
Psychologist	9 (25)	5 (23.8)	4 (26.7)	1.0
Psychiatrist	13 (36.1)	7 (33.3)	6 (40)	.68
Teacher	36 (100)	21 (100)	15 (100)	n/a
Someone w/ same experience	36 (100)	21 (100)	15 (100)	n/a
Doctor	36 (100)	21 (100)	15 (100)	n/a

Discussion

The primary purpose of this study was to examine the level of teenagers' mental health literacy specific to adolescent depression. Because it was a pilot study that involved a relatively small sample size, the findings are admittedly limited in generalizability. However, even with the small sample size, the results offer initial points of comparison to Burns and Rapee's (2006) larger scale study. First and perhaps foremost, the level of detection of adolescent depression was relatively high in the present study, yet no significant differences were found as they related to gender. Over half of the

participants correctly labeled both depressed-based vignettes (Emily and Tony) as being depressed, and three in four participants indicated that Emily was depressed. To their credit, participants rated both depressed vignettes as highest in terms of depression.

This finding is noteworthy. In Burns and Rapee (2006), the corresponding findings of correctly identifying depression in Emily and Tony were 68% and 34%, respectively. The higher rating of Emily as depressed was similar in both settings, yet the rating of Tony as depressed was sizably different with American participants being more inclined to have viewed the fictitious student as depressed.

A closer investigation of this finding points to critical symptoms chosen in the participants' assessment. The vignette of Emily featured pointed comments of suicidality, and, to no surprise, it was this characteristic that was almost uniformly (92%) expressed by participants when asked about the "strongest hints that something was wrong." The element of suicidality also was foremost in Burns and Rapee (2006) in reference to Emily, but its expression was lower (77%) among the Australian sample. At least two possibilities are present. First, it is conceivable that the Australian teenagers were not as concerned about the suicidal ideation as the U.S. participants in the present study. A second possibility is that the awareness of suicidality among adolescents has increased in more recent years in the U.S., prompting a higher rate among the U.S. teenagers.

Suicidality was absent in the vignette of Tony. However, other signs of depression were present, and these symptoms included anhedonia, fatigue, weight loss, insomnia, and diminished ability to think/concentrate. Both U.S. participants in the present study and Australian participants in Burns and Rapee (2006) placed "diminished loss of interest" as the primary symptom of an emotional difficulty at nearly identical rates (73% and 75%, respectively). The same held true for the second-rated symptom (weight loss) in both samples, again expressed by nearly the same percentage (58% in the present study and 61% in Burns and Rapee). The consistency in the ranking and percentages of both samples reflects the teenagers' recognition of lowered interest levels and appetite difficulties leading to weight loss when an adolescent is experiencing depression. In actuality, both behaviors do indeed tend to be two of the six most frequent symptoms among teenagers who are depressed (Roberts, Lewinsohn, & Seeley, 1995).

To their credit, participants in the present study also were able to differentiate the depressed vignettes from the non-depressed vignettes. Mandy was feeling upset over a relationship termination initiated by her former boyfriend that occurred three days prior. Jade expressed family disruption and had become intoxicated at a recent party. Meanwhile, Nick was coping with the loss of a grandparent. None of these vignettes offered significant amounts in the way of genuine depression, and by and large, the majority of participants detected that their respective problems were not severe. A mere 6% of participants indicated that Mandy was depressed. Similarly, none of the participants indicated that Jade was depressed, and only 3% of them assessed Nick to be depressed. This finding offers support for the overall level of mental health literacy of the sample as it pertains to adolescent depression. Moreover, in comparison to the Australian participants in Burns and Rapee (2006), the American sample fared somewhat better: They found that, though none of their participants found Jade to be depressed, 11% and 9% of teenagers in their study did relate Nick and Mandy, respectively, to be depressed.

The participants in the present study demonstrated significantly more concern and anticipated a longer recovery period for the students in the depressive vignettes than in the non-depressed vignettes. In our study, a significant difference was accurately found in estimated recovery time.

The average duration of an initial depressive episode is eight months when no treatment is received (Brent & Birmaher, 2002). These findings add support to the conclusion that the sample possessed a considerable level of literacy. Given the fact that, to our knowledge, this pilot study is the first to assess mental health literacy for adolescent depression among American teenagers, no point of comparison exists. With this point in mind, the finding was relatively surprising. The adolescents in the present study were astute in their detection, concern, and estimated time of recovery, which could be related to a knowledge set based on their classroom education or acquired in other ways (i.e., having a friend who was depressed). Regardless of the mode of acquisition, the adolescents in this study offered greater concern for the fictitious students in the midst of a depressive episode and estimated their recovery more accurately than those students in the non-depressed vignettes.

It was mildly surprising that, unlike Burns and Rapee (2006) and Gifford-May (2002), no significant difference was found in regard to gender and mental health literacy. Burns and Rapee found that girls "clearly demonstrated" higher literacy in their abilities to not only correctly label the depressed vignettes, but also in their expression of greater concern over the students in those same vignettes (p. 232). One point of speculation on their part dealt with the higher levels of depression experienced by young women in later adolescence (Lewinsohn, Rohde, & Seeley, 1998). However, given the absence of significant differences in gender within the sample in the present study, it raises the possibility that young men in the U.S. are more insightful regarding adolescent depression than anticipated.

Burns and Rapee (2006) indicated that the primary reason for raising the mental health literacy of adolescents "is to increase the likelihood that young people can access the most appropriate help when needed" (p. 233). Taken from combined data from 2005 and 2006, an estimated 12% of American youth aged 12–17 obtained professional help for emotional or behavioral problems, and females were more likely than males to receive professional help (Office of Applied Statistics, 2008). However, the literature points to the fact that many other teenagers in need of mental health assistance for various disorders do not receive it. In fact, a mere 39% of those adolescents suffering a depressive episode receive treatment (Office of Applied Statistics, 2009).

The recommended sources for help in our sample were family and counselor, respectively, for Tony, and family and psychiatrist, both at equal percentages, for Emily. For the vignette of Emily, counselor ranked sixth of the nine helping sources. This finding is in contrast to the real-world conditions where nearly 60% of those teenagers with depression in 2007 saw or talked to a counselor in their treatment (Office of Applied Statistics, 2009).

Though the reasoning behind the choices of the helping sources was not sought, the selections lead to intriguing possibilities. First, in the case of Tony, the primary helping source was family, despite information in the vignette that the family system was deteriorating over a parental separation. Even if that played no role in the participants' responses, the choice of family in soliciting help is striking in that parent-adolescent conflicts increase during early adolescent years (Laursen, Coy, & Collins, 1998). Suicidal adolescents reported difficulty in communicating with parents, tremendous stress in their home life, and a distressed relationship with one or both parents (Bostik & Everall, 2006). However, this finding is consistent with a qualitative study (McCarthy, Downes, & Sherman, 2008) pointing to beneficial parental partnerships that developed during depressive episodes and were instrumental in the teenager getting professional help. Counselor, the second recommended helper choice in the vignette of Tony, may not be as surprising. The school from which the data were collected does have a staff of professional school counselors, and this finding may speak to the participants' level of comfort with counselors.

The topic of recommended helper was much different in the vignette of Emily, as the choices were much more equal in terms of the percentages. The selection of psychiatrist as the second recommended helper may point to the participants' perception of the potential for harm and their connotation that a physician with mental health expertise and prescription privileges was needed. In a similar vein, the designations of psychologist and professional were closely behind psychiatrist in recommended helpers, again suggesting the participants' notion that highly trained professionals who likely have a doctoral degree were needed to aid Emily. This finding mirrors recent research, as 27% of those adolescents having a depressive episode saw their family physician or a general practitioner. Roughly the same number sought help from a psychiatrist or psychologist (Office of Applied Statistics, 2009).

Surprisingly, friends were the third most common choice of helper in a case of a student marked by suicidal ideation. With the potential for harm in this student, friends may not be the best source for initial help. However, participants in the present study may have thought that friends would be supportive during an emotionally difficult period. Finally, the lower ranking of the counselor designation may be connected with a perception that a counselor is sought for less complex difficulties.

Burns and Rapee (2006) found that counselor and friend were the two primary overall recommended sources of help. In regard to counselors, they noted that this finding may be reflective of the "access and familiarity" that adolescents in many Australian schools possess with this type of professional (p. 233). Overall, however, the participants in their study offered far lower rankings of a psychologist, professional, or psychiatrist as a source of help in the depressed

vignettes. This finding could point to a familiarity by American teenagers with medical professionals, particularly with the prevalence rate of medication prescribed to this population in the U.S. compared to European countries (Levin, 2008).

Limitations

Limitations are clearly evident in this study. As previously noted, the small sample size that is consistent with pilot studies restricts generalizability. The sample size also may have been composed of more sophisticated students in mental health, as many students in the sample were enrolled in a psychology class. Burns and Rapee (2006) pointed out that the vignette-based instrument of the *Friend in Need* Questionnaire is consistent with the manner in which other mental health literacy studies have been conducted. However, they added, "The extent to which such data can be translated into what actually is likely to happen in the real world is unclear" (p. 234). They also noted that a subsequent challenge for research in this area includes the development of research modalities that examine literacy in a naturalistic setting, such as interviews with adolescents. This suggestion connects to Dundon's (2006) call to bring forth the "voice of the adolescent" that has been lacking in the research on adolescent depression (p. 384).

Implications

This pilot study represents a point of entry in studying American teenagers' mental health literacy in regard to teen depression. Participants in this study showed the ability to correctly differentiate depressed vignettes from non-depressed vignettes and, in their assessment, indicated relevant symptoms of depressive symptoms faced by adolescents. Overall they also expressed sources of help that varied upon the perceived degree of seriousness of the difficulties. The outcomes offer implications regarding the potential benefit of including adolescents in a more direct way when providing outreach or offering services. They demonstrated an accurate understanding of when more intense levels of care could be beneficial.

The study produced results that also warrant further exploration of the relationships between youth and parents during adolescence. Although this developmental period can be marked by tumultuous relationships between them, there may be wisdom in providing communication skills to strengthen such relationships. Such efforts could result in more disclosure of depressive symptoms to parents, which may expedite the process of getting help as opposed to sharing such struggles only with peers. In addition to implications for teens and parents, this research can help shape additional studies in expanding the understanding of literacy.

Future research calls for additional mental health literacy investigations marked not only by larger sample sizes, but also by an in-depth investigation of adolescents of various racial/ethnic differences within the sample. Higher rates of adolescent depression have been found in youth of Latino descent (Guiao & Thompson, 2004; Twenge & Nolen-Hoeksema, 2002), for instance, and it would be important to evaluate the mental health literacy levels among respective backgrounds. With teenage depression being a pressing matter in adolescent mental health, the domain of mental health literacy in regard to this disorder is a vital one that merits additional research.

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