

# Youth's Help-Seeking Intentions for ADHD and Depression: Findings from a National Survey

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**Abstract** This study investigates the role that youth-level factors play in predicting help-seeking intentions in a nationally representative sample. Eleven help-seeking intentions were examined separately by target conditions (ADHD and depression), gender, race/ethnicity, and self-reported diagnosed/non-diagnosed in respect to the target conditions, and interaction effects were tested. Using factor analysis, a traditional help-seeking scale was created, which captured four help-seeking items, and predictive power of youth-level factors in accounting for traditional help-seeking was tested. Study findings provide practitioners and researchers with fresh evidence on what youth-level factors are associated with which help-seeking intentions, and illustrate the challenges involved in better understanding the complexity of the help-seeking process among youth in the context of ADHD/Depression. With increased understanding of youth's perceptions and the complexity of their help-seeking behavior, community-based efforts to develop effective strategies that support active help-seeking behavior and eliminate barriers to appropriate care can have a greater likelihood of success.

**Keywords** Help-seeking intentions · ADHD · Depression · Youth-level factors · National online survey

## Introduction

The intention to seek help is a prerequisite, when voluntary treatment is involved, to the success of any mental health treatment program. This issue, however, becomes complicated for young people under the age of 18, involving a set of complex social and legal circumstances related to age and status. In general, states have traditionally recognized that individuals aged 18 years and over have full legal competence, unless they have been emancipated at an earlier age by the courts or by marriage and have full legal capacity, such that they are legally recognized as being capable of making decisions relating to their own mental health care. Currently the age of consent to mental health treatment (without parent involvement) varies widely, from as young as 12 years of age in California (California Family Code § 6924) and Illinois (405 ILCS 5/3-501) to 18 in Arizona (Arizona revised Statute § 36-2024). Unlike most other states, Arizona does not have particularized statutes that specify minimum ages for minors' consent to various types of health care including mental health. Prior to the age of consent, most children receive services primarily because their parents request help, or at least accede to recommendations from teachers, pediatricians, or others to seek advice about their children's development or behaviors. Although many jurisdictions allow parents or guardians to consent to treatment on behalf of a non-consenting minor, efforts to help are unlikely to be successful without the cooperation and engagement of the young person. These two considerations highlight the challenges inherent in understanding young people's help-seeking intentions.

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## Help-Seeking Intentions and Youth Level Factors

Help-seeking among youth has been defined as “Any action or activity carried out by a young person who perceives herself/himself as having a need for personal, psychological, affective or health-related assistance or services, with the purpose of relieving or addressing this need in a positive way” (Barker 2007, p. 49). Findings from previous studies of willingness to seek psychological help (Sheffield et al. 2004), and beliefs about sources of help for depression and ADHD (Swords et al. 2011) among youth illustrate the complexity of understanding adolescent help-seeking behavior. Looking at help-seeking intentions, adolescents in general were found to be more likely to seek help for interpersonal problems from friends, but more likely to approach their mothers about mental health concerns (Sullivan et al. 2002). Although interest in incorporating diversity and gender-based differences into research on help-seeking has increased, the vast majority of previous studies have focused on health care receiving, while only a handful addressed help-seeking intentions. In a study by Schonert-Reichl et al. (1995), being white and female was associated with seeking help from a mental health professional, as well as seeking both formal and informal services. These authors also reported that whites were more likely to seek mental health professional help, while African American, Asian, and Latino youth were more likely to seek help from school counselors.

Researchers have reported that young people are influenced by their families’ reactions to their mental health condition, their experience of receiving mental health services, or both. For example, in-depth interviews with young people 17–24 years old (Cohen et al. 2009) found that although some parents were supportive of their children with mental health conditions, others discouraged or actually prevented young people from getting the help they needed. These family responses were related to a lack of understanding of mental health issues, negative attitudes about mental health treatment, and concerns about negative reactions or stigmatization on the part of people outside the family. In another study with younger participants (14–17 age group) having substance use problems, youth reported that family lack of understanding of their problems and the possibility that parents might not be supportive or trusting if they knew about the youth’s substance use stood in the way of their seeking help (Ballon et al. 2004).

Perceived stigma associated with reporting mental health problems or receiving mental health treatment has been found to negatively affect help-seeking intentions among youth. Recent research has added to the knowledge base on the attitudes of adults toward children with mental or emotional conditions (Martin et al. 2007), and on how children and youth may perceive and/or behave toward

their peers who exhibit externalizing or withdrawn behavior (Hennessy et al. 2008), or who are known to have a mental health label (Corrigan et al. 2005). However, the relationship between perceived stigma and help-seeking intentions in young people has not been extensively studied.

A study of children’s stigmatization of childhood depression and ADHD (Coleman et al. 2009; Walker et al. 2008) found racial/ethnic differences including that Asian-Pacific Islander respondents reported more negative attributions about a peer with depression and more negative family attitudes toward children with ADHD or depression than other groups. Researchers seeking to explain non-help-seeking among young adults with mental distress developed a dynamic model of help-seeking that includes a period of attempting to normalize problems or concerns followed by acceptance of a “real” problem (Biddle et al. 2007). In this framework, postponing help is related to anticipated negative consequences, which include stigma associated with having a mental illness, an identity shift, and a belief that acceptance of a mental health diagnosis implies permanence of the condition. These findings bear a conceptual similarity to other research that differentiates help-seeking preferences of adolescents into either “watchful waiting” or “active treatment,” and found that prior treatment experience was related to a preference for active treatment over watchful waiting (Jaycox et al. 2006). These authors also found a strong general tendency for adolescents to prefer active treatment and to choose counseling over medication.

A number of studies addressing mental health literacy found that if young people recognize they have a mental health problem, and have the relevant knowledge and beliefs about risks, causes, and treatment effects, they are more likely to seek help (Burns and Rapee 2006; Barker 2007; Rickwood et al. 2007; Swords et al. 2011). In the event of experiencing mental health difficulty, young people’s beliefs regarding the likelihood of improvement may be associated with specific help-seeking options, and thus may also be relevant to their help-seeking intentions. As there is a lack of information about the significance of youth’s views on the likelihood of improvement, in anticipation of experiencing depression or ADHD, in the context of accounting for their help-seeking intentions, this study will seek to fill in this gap in the literature.

## Conceptual Framework and Study Purpose

The Theory of Planned Behavior (TPB) (Ajzen 1991) articulates how an individual’s intention is causally related to a given behavior. The theory provides a useful conceptual framework that permits understanding and prediction of particular behaviors such as help-seeking for mental

illness in specific contexts. In the theory, attitudes toward the behavior, subjective norms with respect to the behavior, and perceived control over the behavior were found to explain and predict intentions and behaviors (Armitage and Conner 2001). Looking at its applications to health related behaviors, Gaston and Gerjo (1996) found that attitudes and perceived behavioral control were most often the significant variables responsible for explained variations in intention. The study also found that intention remained the most important predictor for health related behaviors.

Using a conceptual framework based on the TPB, this study seeks to explore the predictive power of the following variables in the explanation of help-seeking intentions: (a) attitudes toward help-seeking behaviors, using the indicator *perceived likelihood of improvement*; (b) subjective norms with respect to the behavior, using the indicators *social distance*, *perceived family attitude*, and cultural influences measured by race/ethnicity as a proxy variable; and (c) perceived control over the behavior, using family medical history as an indicator. There are many other factors (e.g., resources, accessibility and availability of services, and legal and policy contexts) that may influence intentions, and thereby the effect of the perceived difficulty of performing the behavior. However, this study is focused on youth-level factors, excluding parents/guardians and system level factors because of the virtual absence of research that examined youth-level factors.

This study aims to improve our understanding of help-seeking intentions for depression and ADHD among those who are less likely to have full legal capacity to make their own health care decisions. Help-seeking intentions regarding depression and ADHD among those who are between 10 and 18 years of age are a particular focus of this study for two reasons. First, mental health and behavioral problems often emerge in the early stages of life (Swords et al. 2011), and youth are at great risk for depressive disorders, which impact functioning in the home, school, and community, and could substantially increase the risk of suicide (Kisch et al. 2005; Thompson et al. 2005). Second, there has been relatively little discussion about *help-seeking intentions of youth*, with much of what does exist in the literature focusing on *help-seeking decisions made by parents/guardians* for their children (Pescosolido et al. 2008; Thurston and Vicky 2008). Adolescence has long been characterized as a time when individuals begin to explore psychological characteristics of the self, seek increased autonomy in the process of identity development, expand their social environment, and become more susceptible to peer influences (Steinberg and Morris 2001). Thus, help-seeking intentions of youth who experience, or believe they experience, difficulties related to mental health might be significantly different from the help-seeking decision-making process of parents and legal

guardians for their children. Research exploring the help-seeking intentions of youth is needed to better inform interventions that seek to eliminate barriers experienced by young people to appropriate care, and to develop effective strategies that support their active help-seeking behavior.

Since this study sample was comprised of youth living in the community in the US and utilized random sampling, this study provides a wide range of comparative findings addressing individual-level factors which are relevant to community-based child demographic characteristics. This exploratory study comprehensively examines youth-level factors, and excludes family/system level factors from its research model. To the authors' best knowledge, this is the first attempt to provide a specific list of help-seeking intentions and to examine the role that youth-level factors play in predicting help-seeking intentions in a nationally representative sample. The examination of youth-level factors are organized as follows: (a) 11 help-seeking intentions were examined separately by target conditions (ADHD and depression), gender, race/ethnicity, and self-reported diagnosed/non-diagnosed in respect to the target conditions, (b) and then interaction effects were tested including: target conditions by gender, target conditions by race/ethnicity, and target conditions by self-reported diagnosed/non-diagnosed. Using factor analysis, a *traditional help-seeking* scale was created, which captured four of the 11 help-seeking items, *talk to my parents*, *talk to a counselor or therapist*, *talk to a doctor* and *take medication*. The predictive power of youth-level factors in accounting for *traditional help-seeking* was then tested.

Study findings provide a basis for making empirically informed decisions regarding future mental health interventions for youth. This study presents a window into youth's decision-making processes that offers a better understanding of what forms of help youth anticipate they would seek if they had depression or ADHD. This improved understanding can be used by mental health researchers and practitioners to better inform their outreach efforts to this age group.

## Method

### Procedures

Data for this study were collected via an Internet-based survey designed by researchers at Portland State University, working in collaboration and consultation with young people who had themselves experienced serious emotional or behavioral disorders. This survey was designed to be used with children and adolescents between the ages of eight and 18, however, some of the items, including those focused on help-seeking, were asked only of respondents

10 years of age and older. Thus, only data for children and adolescents aged 10–18 are reported on here. Previous studies using child participants have found that children as young as age five are able to provide clear, logical answers to questions about mental illness (Fox et al. 2008; Hennessy et al. 2008). Other studies have found that children as young as eight are able to provide internally consistent responses to items with response sets presented as Likert scales (Borgers et al. 2000).

After the items were pre-tested and finalized, the survey was administered online by the polling firm Harris Interactive (HI). HI maintains a “panel” of more than 6 million members who have agreed to participate in its surveys. Respondents for the Stigmatization Survey were young people aged ten to 18 who had been recruited into HI’s children’s panel. The youngest children, up to age 12, were children of adult members of HI panels. These children had been recruited by HI into the children’s panel with parental permission. Older children (13 and older) were recruited by HI either through contact with parents who were adult panel members or else directly, through notices placed online or through recruitment efforts in which young people provided their emails and were later invited by HI to join the children’s survey panel.

Using the process that it typically employs for Internet surveys with children, HI randomly selected child/youth panel members and invited them by email to participate in the survey. For children under 13, an informational email was first sent to the parent panel member. The parent had to respond affirmatively to the email before an invitation was sent to the child. Invitations continued to be emailed, and responses gathered, until US Census-based demographic targets were met. Finally, survey participants were recruited from all 50 states (more recruitment in more populous states) throughout urban, suburban, and rural areas (more recruitment in suburban areas). The data were then weighted for age, gender, and race/ethnicity (African Americans and Latinos were over-sampled) to bring them into line with their actual proportions in the population. Weighted samples from the Harris Interactive panels have provided data that are comparable with data from random samples of general populations. Weighted sample compared to un-weighted has been described in some detail elsewhere (Walker et al. 2008) and is only briefly summarized here.

Harris Interactive (HI) is a member organization of the Council of American Survey Research Organizations (CASRO). CASRO requires its member organizations to certify that they are in compliance with the CASRO Code of Standards and Ethics for Survey Research (Council of American Survey Research Organizations 1997–2011). The Code of Standards includes detailed procedures for protecting survey respondents and maintaining confidentiality. Researchers at Portland State University (PSU)

conducted secondary analyses on the data, which were transmitted to them from HI. The dataset provided by HI included no personally identifying information about the young people participating in the survey. Due to the sufficiently de-identified nature of the data, the Human Subjects Research Review Committee at PSU certified that the study met the criteria for a secondary analysis, and determined the study was exempt.

## Measures

Survey participants were randomly assigned to one of three survey versions, focusing on depression, ADHD, or asthma, and participated in online surveys of approximately 30-min duration. In order to focus on help-seeking intentions among youth for mental illness, data provided by young people assigned to the asthma condition were not used for this study. The first section of the survey included a brief vignette about Michael, a young person who has the target condition. Respondents were asked to imagine that Michael is a student in their class and that, because of this condition, Michael sees a doctor, has been in the hospital several times, and spends part of the school day in special classes or activities. Respondents then answered a series of questions about Michael, including questions about what sort of help they might seek if they had Michael’s condition, the likelihood that Michael’s condition will improve, peer preferences for social distance from Michael, and perceptions of family attitudes related to Michael’s condition.

Help-seeking items on the survey were prefaced by the phrase “if you had [target condition] how likely is it that you would...” This stem was followed by a series of 11 help-seeking intentions that ranged from talking to adults or friends to praying or seeking information online (wordings for these items are shown in Table 3). Respondents rated whether or not they would undertake each help-seeking option using a 3-point scale: 1 = *no*, 2 = *maybe*, 3 = *yes*. In order to find a psychometric construct(s) which would best measure common variances among these 11 help-seeking items, principal axis factor analysis with Varimax Rotation was conducted and showed four items loading onto the first—and strongest—factor, with no significant cross-loading onto other factors (no cross-loadings greater than .36). The factor loadings for the items ranged from 0.51 to 0.85. No other strong factors emerged for the help-seeking items. These items—*talk to my parents*, *talk to a counselor or therapist*, *talk to a doctor* and *take medication*—were used to create a single scaled construct.

Previous studies have categorized a diversity of help-seeking sources based on their degree of formality (Rickwood et al. 2005). Informal help-seeking is based on social relationships, such as friends and family, while formal

help-seeking is directed towards professional sources of help, i.e., individuals with a recognized role and appropriate training in providing help and advice, such as mental and other health professionals. Interestingly, the single construct identified in this study includes a *talk to my parents* component, which has traditionally been identified as a component of informal help-seeking, as well as components that are usually viewed as more formal including talking to various health professionals and taking medication. As these study participants are more likely to rely on parents in accessing formal help-seeking, it is not surprising to have a single factor emerge that includes parents along with formal help-seeking items. This single scaled construct is identified as *traditional help-seeking*, since for youth suffering from depression or ADHD, talking to parents has traditionally lead to talking to counselors/therapists or doctors and the use of medications. Scale scores were calculated by summing the individual item scores (possible range from 4 to 12); higher scores represent a greater likelihood of *traditional help-seeking*. Cronbach's alpha for *traditional help-seeking* was .74 for the whole sample (.76 and .74 for the depression and ADHD groups, respectively). Traditional help-seeking scores were used as the criterion variable in hierarchical multiple regression models along with youth-level factors as predictive variables.

*Likelihood of improvement* and *perceived family attitude* were measured and wording for the items are shown in Table 2. For each of the *likelihood of improvement* items, respondents gave a rating on a Likert scale that ranged from 1 = not at all likely to 4 = extremely likely. For the *family attitude* items, participants provided ratings that ranged from 1 = disagree strongly to 4 = agree strongly. *Social distance* has been used frequently in studies with adults as a general measure of stigmatization toward people with mental illness (Jorm and Oh 2009; Lauber et al. 2004; Wood and Wahl 2006). This study adapted the Social Distance Scale (SDS), which asks respondents to rate their willingness to engage in five different types of interactions with others. The items were modified to reflect interactions typical of childhood. For example, the item asking about willingness to “work with” a person was changed to “work on a school project with.” Responses for each item were rated on a 5-point scale and summed to produce a total score ranging from 5 to 25, with higher scores representing greater stigmatization. Internal consistency of the SDS in other studies varied from 0.75 to 0.92 (Wood and Wahl 2006), and very good reliability was observed in this study (Cronbach's  $\alpha = 0.88$ ).

Study participants were also asked whether they had ever been diagnosed with the target condition, and responses were dichotomized by collapsing responses indicating agreement. Thus, two groups were identified:

one for those who reported being *diagnosed* (i.e., maybe and yes were recoded as 1) and the other for *non-diagnosed* (i.e., no as 0). In order to address family medical history, *contact* item—“Having family member(s) who has(have) target condition (depression or ADHD)” —was also created in a similar way with respondents self-reporting as being diagnosed/non-diagnosed.

## Data Analyses

*T* tests or ANOVA (with Bonferroni post hoc comparison tests) were used to test for differences between group means across target conditions, diagnosed/non-diagnosed, gender, and race/ethnicity for each of the 11 help-seeking items. Chi square was used to test for independence between various participant characteristics—e.g., gender, race/ethnicity—and whether or not participants reported they had been diagnosed with a target condition (*diagnosed/non-diagnosed*). Subsequent analyses used hierarchical multiple regression to predict traditional help-seeking among diagnosed and non-diagnosed respondents. In step 1 of each model, main effects including demographic and psychosocial variables were entered into the regression simultaneously. In step 2, all interaction terms were entered such as including (a) depression by each variable, (b) race/ethnicity by female, (c) race/ethnicity by age, and (d) female by age; and a final model was arrived at through backwards removal of nonsignificant interaction terms.

## Results

### Participant Backgrounds

Study participants resided in all 50 states, and more participants lived in more populous states including, for example, California (10.3 %) or Texas (7.6 %) compared to South Dakota (0.2 %) or Vermont (0.1 %). When they were sampled, participants were currently attending schools in an urban (29.5 %), suburban (45.5 %), or small town or rural area (21.8 %). About one out of five study participants indicated their parents had college degrees or above (21.5 % among mothers vs. 20.9 % among fathers), while about one of ten participants reported their parents did not have high school degrees (11.4 % among mothers vs. 14.0 % among fathers). As it was necessary to examine what study participants knew about the target conditions, a knowledge score for each target condition was calculated based answers to nine items that addressed symptoms of each condition (e.g., When a person has the [target condition], it means that he/she does not enjoy things, even things he/she usually likes). A total knowledge score, which ranged from 0 (all wrong answers) to 9 (all accurate



answers), was calculated, and respondents were found to have a relatively accurate level of knowledge ( $\bar{x}$ = 7.79,  $SD$  = 1.32 among the depression group;  $\bar{x}$ = 8.12,  $SD$  = 1.18 among the ADHD group).

**Participant Characteristics Organized by Youth-Level Factors**

Table 1 displays the distribution of study participants across target condition and a range of categories and organized by whether they were *non-diagnosed* or *diagnosed*. Of 701 study participants, 332 (47.3 %) were assigned to the depression group, and 369 (52.6 %) to the ADHD group. About half of the participants (49.9 %) were male; 57 % self-identified as being White, 17 % as Hispanic, 16 % as African American, and 5 % as Asian/Pacific Islander (API); and a total of 97 (13.7 %) respondents reported they had ever been diagnosed with depression or ADHD. Although not shown in Table 1, statistical comparisons among Whites, African-Americans, or Hispanics on the prevalence of being diagnosed revealed no significant differences between groups. API participants were excluded from this test as their sample size was too small to allow for testing of possible differences. Within specific target conditions, Hispanics were more likely to have been diagnosed for depression ( $\chi^2(2) = 7.33, p < 0.05$ ); on the other hand, no significant differences in the prevalence of having a diagnosis of ADHD across the three racial/ethnic groups were found. No gender differences were found in the prevalence of having a diagnosis in general, and in the prevalence of reporting a diagnosis of depression in particular. However, boys were about twice as likely to report having a diagnosis of ADHD than

girls ( $\chi^2(1) = 4.17, p < 0.05$ ). Compared to those who did not have a family member with a diagnosis of depression or ADHD, study participants who reported having a family member with a diagnosis were about six times more likely to have a diagnosis themselves ( $\chi^2(1) = 85.23, p < 0.001$ ) with the same target condition. Those who had a family member with a diagnosis of depression were about four times more likely to report receiving a diagnosis of that same target condition ( $\chi^2(1) = 20.06, p < 0.001$ ); and those who had a family member with a diagnosis of ADHD were about nine times more likely to report receiving a diagnosis of that target condition ( $\chi^2(1) = 76.47, p < 0.001$ ).

Table 2 reports means for the continuously measured youth-level predictors organized by study participants who self-reported being *non-diagnosed/diagnosed*, and, within *diagnosed*, for depression or ADHD. The diagnosed group had higher means for *likelihood of improvement-wait*, and *perceived family attitude-blame* parents, and a lower mean for *social distance*; however, within the diagnosed group, the depression group had a higher mean for *social distance* than the ADHD group.

**Help-Seeking Intentions Varied by Youth-Level Factors**

Looking at Table 3, overall means for help-seeking items were highest for *talk to parents*, *talk to doctor*, *talk to friend*, and *get information*. Respondents in the depression group had higher means for *talk to friend*, *talk to parents*, *talk to counselor*, *talk to doctor*, while those in the ADHD group had higher means for *talk to parents*, *talk to doctor*, *take medication*, and *get information*. *T* test revealed

**Table 1** Distributions of participants who are *non-diagnosed/diagnosed* and *diagnosed* with depression/ADHD

Youth-level predictors	Total (n = 701, 100 %)		Depression (n = 332, 100 %)		ADHD (n = 369, 100 %)	
	<i>Non-diagnosed</i> 604 (86.2)	<i>Diagnosed</i> 97 (13.8)	<i>Non-diagnosed</i> 293 (88.3)	<i>Diagnosed</i> 39 (11.7)	<i>Non-diagnosed</i> 311 (84.3)	<i>Diagnosed</i> 58 (15.7)
<i>Categorically measured variables (n, %)</i>						
<i>Race/ethnicity<sup>a</sup></i>						
White	345 (85.6)	58 (14.4)	173 (87.8)	24 (12.2)	172 (83.9)	33 (16.1)
African-American	102 (88.7)	13 (11.3)	54 (96.4)	2 (3.6)	47 (81.0)	11 (19.0)
Asian/Pacific Islanders	33 (94.3)	2 (5.7)	17 (94.4)	1 (5.6)	16 (94.1)	1 (5.9)
Hispanic	101 (83.5)	20 (16.5)	43 (79.6)	11 (20.4)	59 (86.8)	9 (13.2)
<i>Gender</i>						
Male	299 (85.4)	51 (14.6)	146 (91.3)	14 (8.8)	153 (80.5)	37 (19.5)
Female	305 (86.9)	46 (13.1)	147 (85.5)	25 (14.5)	158 (88.3)	21 (11.7)
<i>Contact: Having family member(s) who has (have) target condition (depression or ADHD)<sup>b</sup></i>						
Yes	180 (70.0)	77 (30.0)	112 (78.9)	30 (21.1)	69 (59.5)	47 (40.5)
No	411 (95.4)	20 (4.6)	175 (95.1)	9 (4.9)	236 (95.5)	11 (4.5)

<sup>a</sup> Excludes Native American or Alaska Native, mixed racial background, and other race

<sup>b</sup> Due to missing data, the total number of respondents differs from the sample size

**Table 2** Means of continuously measured variables for non-diagnosed/ diagnosed and diagnosed with depression/ADHD

Youth-level predictors	Non-diagnosed participants		Diagnosed participants		Statistical comparison		
	Participants total (n = 604)	( $\bar{x}$ , SD)	Total (n = 97)	Depression (n = 39)	ADHD (n = 58)	Non-diagnosed versus diagnosed	Within diagnosed Dep versus ADHD
<b>Continuously measured variables (<math>\bar{x}</math>, SD)</b>							
Traditional help-seeking (range: 4–12)	9.23 (2.37)		9.12 (2.03)	8.77 (2.07)	9.35 (1.98)	ns	ns
Age	14.11 (2.59)		13.85 (2.77)	14.31 (2.56)	13.55 (2.88)	ns	ns
Social distance (range: 5–25)	14.71 (4.72)		13.65 (4.95)	15.87 (5.60)	12.13 (3.80)	t(699) = 2.04*	t(95) = 3.92***
<i>Likelihood of improvement</i> : How likely do you think it is that Michael's problems will get better if he... (range: 1: not at all likely to 4 = extremely likely)							
See psychologist: has regular visits with a psychologist	3.28 (1.01)		3.23 (1.23)	3.29 (1.16)	3.19 (1.28)	ns	ns
Take medication: takes medication	3.10 (1.08)		3.26 (1.15)	3.09 (1.24)	3.37 (1.08)	ns	ns
Wait: does nothing	1.27 (0.64)		1.54 (0.92)	1.42 (0.86)	1.62 (0.95)	t(11.46) = -2.80**	ns
<i>Perceived family attitude</i> : people in my family think that... (range: 1: disagree strongly to 4 = agree strongly)							
Ashamed: having target condition is something to be ashamed of	1.46 (0.65)		1.59 (0.84)	1.71 (0.92)	1.52 (0.78)	ns	ns
Don't talk to others: if you have target condition, you should not tell anyone outside the family	1.71 (0.78)		1.86 (0.88)	2.07 (0.96)	1.72 (0.81)	ns	ns
Blame parents: if a child has target condition, it means the parents are not good parents	1.49 (0.65)		1.67 (0.91)	1.78 (0.97)	1.58 (0.87)	t(98.67) = -1.70*	ns

Statistical significance was evaluated using 2-sided design-based tests

Dep depression group

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

**Table 3** Youth-level factor comparisons on 11 help-seeking items

Help-seeking items: if you thought you had [target condition], which of the following would you do? (range: 1: no, 2: maybe, 3: yes)	Target condition (n, %)		Stat. Com. by condition		Diagnosis (n, %)		Stat. Com. by diagnosis		Gender (n, %)		Stat. Com. by gender
	Total	ADHD	t test		Non-dia.	Diagnosed	t test		Male	Female	
	Mean (SD)	Mean (SD)	r	test	Mean (SD)	Mean (SD)	r	test	Mean (SD)	Mean (SD)	
Talk to my parents*	2.48 (0.73)	2.31 (0.76)	2.31 (0.76)	2.63 (0.66)	Adhd > Dep	2.50 (0.73)	2.37 (0.70)	ns	2.48 (0.70)	2.48 (0.75)	ns
Talk to a doctor*	2.39 (0.74)	2.23 (0.76)	2.23 (0.76)	2.54 (0.69)	Adhd > Dep	2.41 (0.75)	2.31 (0.65)	ns	2.39 (0.70)	2.40 (0.77)	ns
Talk to a friend	2.32 (0.76)	2.44 (0.72)	2.44 (0.72)	2.21 (0.78)	Dep > Adhd	2.32 (0.78)	2.29 (0.67)	ns	2.22 (0.79)	2.41 (0.72)	F > M
Get information from books or the Internet	2.23 (0.76)	2.15 (0.78)	2.15 (0.78)	2.31 (0.74)	Adhd > Dep	2.26 (0.78)	2.07 (0.67)	Non-dia. > Dia.	2.17 (0.79)	2.29 (0.74)	F > M
Act normal: try harder to think and act like normal	2.21 (0.77)	2.17 (0.78)	2.17 (0.78)	2.24 (0.76)	ns	2.22 (0.78)	2.14 (0.70)	ns	2.19 (0.74)	2.23 (0.80)	ns
Talk to a counselor or therapist*	2.20 (0.76)	2.24 (0.75)	2.24 (0.75)	2.17 (0.77)	ns	2.21 (0.77)	2.18 (0.70)	ns	2.22 (0.71)	2.18 (0.80)	ns
Pray	2.16 (0.84)	2.12 (0.86)	2.12 (0.86)	2.19 (0.83)	ns	2.20 (0.85)	1.88 (0.75)	Non-dia. > Dia.	2.06 (0.85)	2.25 (0.83)	F > M
Take medication*	2.14 (0.76)	1.88 (0.75)	1.88 (0.75)	2.38 (0.70)	Adhd > Dep	2.12 (0.78)	2.26 (0.65)	ns	2.16 (0.74)	2.12 (0.79)	ns
Talk to another adult	1.96 (0.77)	1.97 (0.75)	1.97 (0.75)	1.95 (0.79)	ns	1.95 (0.78)	2.01 (0.71)	ns	2.00 (0.77)	1.94 (0.77)	ns
Change habits: change my eating, sleeping or other habits	1.82 (0.74)	1.93 (0.75)	1.93 (0.75)	1.72 (0.72)	Dep > Adhd	1.83 (0.75)	1.74 (0.65)	ns	1.79 (0.73)	1.85 (0.74)	ns
Wait: Wait for it to go away	1.71 (0.75)	1.94 (0.78)	1.94 (0.78)	1.51 (0.65)	Dep > Adhd	1.72 (0.76)	1.66 (0.68)	ns	1.74 (0.73)	1.70 (0.76)	ns

Stat. Com statistical comparison, Adhd ADHD, Dep depression, Non-dia non-diagnosed, Dig diagnosed, F female, M male

\* Indicates items included in traditional help-seeking scale

respondents in the depression group had higher means for *talk to friend*, *wait*, and *change habits* than those in the ADHD group, who in turn scored higher on *talk to my parents*, *talk to a doctor*, *take medication*, and *get information*. Comparing overall mean differences of those who self-reported being *non-diagnosed* versus *diagnosed* in terms of help-seeking intentions, the only significant differences were found on the *pray* and *get information* items, which were higher among participants who had not been diagnosed ( $p < 0.001$  and  $p < 0.01$  respectively). Females had higher means for *talk to friend*, *get information*, and *pray*.

Examining mean differences among the four race/ethnic groups in endorsement of help-seeking items in Table 4, compared to all other groups, API participants had the highest mean on the *wait* item, and African-American participants on the *pray* item. Whites were on average more likely than African-American or Hispanic respondents to endorse *talk to parents* or *talk to doctor*, while African-American respondents were less likely than White or API respondents to endorse *talk to friend*. Although not shown in Table 4, examining gender interaction among target conditions revealed that female participants in the depression group expressed higher willingness to seek out help via talking to their friends, and this was the case for females in the ADHD group as well. Female participants in the ADHD group indicated greater willingness to *talk to parents*. Examining race/ethnic interaction within depression, API participants endorsed *wait* more than any other race/ethnic group as a help-seeking intention, while African Americans chose *pray* highest as a help-seeking intention. All statistical differences were significant at the .05 level.

### Predictive Power of Youth-Level Factors

Table 5 shows the results of regression analyses using *traditional help-seeking* as the dependent variable. Among non-diagnosed participants, being in the depression target condition or actually having a family member with either condition, being African-American, having higher ratings on *family attitude-blame* parents and *likelihood of improvement-wait* predicted lower help-seeking. Only having higher ratings on *likelihood of improvement-see* psychologist and *likelihood of improvement-takes* medication predicted higher help-seeking among non-diagnosed respondents. Among non-diagnosed respondents, main effect variables retained roughly the same pattern of strength and direction of relationship in the interaction model, although there were two significant interaction terms, both related to Hispanic participants. First, Hispanic children in the depression condition scored lower on traditional help-seeking than all other race/ethnic groups.



**Table 4** Youth-level factor comparisons on 11 help-seeking items (cont.)

Help-seeking items: if you thought you had [target condition], which of the following would you do? (range: 1: no, 2: maybe, 3: yes)	Race/ethnicity ( <i>n</i> , %)				Stat. Com. by race/ethnicity
	White	African-American	API	Hispanic	
	402 (57.4)	115 (16.3)	35 (5.0)	122 (17.3)	ANOVA
	Mean ( <i>SD</i> )				
Talk to my parents*	2.57 (0.68)	2.38 (0.77)	2.43 (0.70)	2.37 (0.79)	W > B, H
Talk to a doctor*	2.48 (0.68)	2.29 (0.84)	2.43 (0.66)	2.30 (0.78)	W > B, H
Talk to a friend	2.36 (0.74)	2.15 (0.84)	2.46 (0.74)	2.33 (0.73)	W > B; A > B
Get information: get information from books or the internet	2.24 (0.77)	2.24 (0.76)	2.29 (0.83)	2.26 (0.76)	ns
Act normal: try harder to think and act like normal	2.24 (0.77)	2.20 (0.80)	2.31 (0.58)	2.09 (0.81)	ns
Talk to a counselor or therapist*	2.25 (0.74)	2.24 (0.83)	2.29 (0.52)	2.12 (0.82)	ns
Pray	2.08 (0.87)	2.48 (0.66)	1.97 (0.95)	2.20 (0.81)	B > W, A, H
Take medication*	2.20 (0.76)	2.02 (0.80)	2.06 (0.73)	2.17 (0.76)	ns
Talk to another adult	1.98 (0.77)	1.93 (0.78)	2.14 (0.65)	2.02 (0.79)	ns
Change habits: change my eating, sleeping or other habits	1.79 (0.75)	1.89 (0.75)	1.89 (0.58)	1.80 (0.75)	ns
Wait: wait for it to go away	1.65 (0.75)	1.70 (0.77)	2.06 (0.80)	1.69 (0.66)	A > W, B, H

Stat. Com statistical comparison, W white, B African American, A Asian/Pacific Islanders, H Hispanic

\* Indicates items included in *traditional help-seeking* scale

**Table 5** Regression models for traditional help-seeking among non-diagnosed and diagnosed participants

	<i>Non-diagnosed</i>		<i>Diagnosed</i>	
	Step 1 ( $R^2 = 0.17$ )	Step 2 ( $R^2 = 0.18$ )	Step 1 ( $R^2 = 0.31$ )	Step 2 ( $R^2 = 0.39$ )
Depression group	-0.228***	-0.193***	-0.046	-0.117
Race/ethnicity				
African-American	-0.085	-0.080	-0.324*	-0.381**
Asian/Pacific Islanders	0.031	0.043	-0.149	-0.138
Hispanic	-0.053	-0.010	-0.091	-0.112
Female	-0.058	-0.052	0.182	0.208 <sup>a</sup>
Age	0.026	-0.015	-0.093	-0.031
Contact: having family member(s) who has(have) <i>target condition</i> (depression or ADHD)	-0.094*	-0.088*	0.053	0.044
<i>Likelihood of improvement</i> : How likely do you think it is that Michael's problems will get better if he				
See psychologist: has regular visits with a psychologist	0.177***	0.178***	-0.040	0.112
Take medication: takes medication	0.134**	0.127**	0.322	0.242
Wait: does nothing	-0.088*	-0.100*	-0.173	-0.151
Social distance	0.005	-0.009	-0.226 <sup>a</sup>	-0.580***
<i>Perceived family attitude</i> : people in my family think that...				
Ashamed: having target condition is something to be ashamed of	-0.004	-0.011	0.333	0.389
Don't talk to others: if you have target condition, you should not tell anyone outside the family	-0.052	-0.060	-0.158	-0.151
Blame parents: if a child has target condition, it means the parents are not good parents	-0.109*	-0.096	-0.180	-0.242
Interaction terms				
Depression × Hispanic		-0.134*		-
Age × Hispanic		0.113*		-
Depression × social distance				0.476**

Standardized coefficients are reported; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$  (<sup>a</sup> $p < 0.10$ , trend level significance)

Second, among Hispanic children, help-seeking intention increased with age.

Among participants who reported they had been *diagnosed* with either of the two target conditions, being African-American and reporting higher stigma (social distance) predicted lower help-seeking in both main and interaction models. In the interaction model, after removing non-significant interaction terms, only one interaction term, children in the depression group who reported higher stigma, was found to predict higher help-seeking ( $\beta = 0.48$ ); and the negative effect on help-seeking of being African-American and reporting higher stigma was strengthened ( $\beta = -0.32$  to  $-0.38$  and  $\beta = -0.23$  to  $-0.58$  respectively).

## Discussion

Overall, four help-seeking items (*talk to my parents*, *talk to a doctor*, *talk to a friend*, and *get information*) were the most frequently chosen strategies among study participants. Considering the age of participants, it is not surprising that they were thinking about reaching out to parents and subsequently seeking professional help from doctors, as well as thinking about talking to friends. Parents are particularly important to young people since they play a significant role as a starting point for referral to professional services until young people are financially and/or legally independent. As young people progress through adolescence, the role of friends becomes more prominent even in seeking help for their mental illness. Young people develop perceptions about mental illness as problematic or as necessitating professional help through their interactions mainly with family members and peer groups. However, the pattern of help-seeking is changing along with development of new technology. Young people are typically fast adopters of new technologies including the Internet. The use of Internet searching for health information has been studied in previous research, and there are growing concerns regarding the utility and trustworthiness of such information (Rideout 2001; Skinner et al. 2003; Ybarra and Suman 2006). To encourage and support adolescents to seek help in an appropriate and timely manner, it is recommended that future research focus attention on the role of the Internet, especially in the use of social networking, to better understand how these new technologies affect children's help-seeking intentions and behaviors.

### ADHD and Depression

Similar to the findings of previous studies (Sheffield et al. 2004; Swords et al. 2011), which reported on the complexity of adolescent help-seeking behavior, considerable variation was apparent across study target conditions,

gender and race/ethnicity, and according to whether respondents had ever been *diagnosed* with the target condition. For example, adolescents in the depression condition favored *talk to a friend* or *change habits* more than respondents who considered what they would do if they had ADHD, who preferred *talk to my parents*, *talk to a doctor*, *take medication*, or *get information*. These variations in help-seeking intentions may be attributable to how youth view the different natures of these two disorders. Youth may view ADHD as being more of a problematic condition causing unacceptable behavior, which requires the intervention of authority figures such as parents and doctors to eliminate the cause of the problematic behavior through the utilization of medication (Exley 2005). The fact that stimulant medication by itself is well known to be the most common treatment for ADHD (Thorell and Dahlstrom 2009) is likely to affect how youth perceive what they would likely do if they should suffer from ADHD.

On the other hand, youth, especially those who have not been diagnosed and comprise the vast majority of this sample, may view depression as more of an emotional condition. The term depression can refer to a wide range of phenomena, from major depressive disorder to minor depression including seasonal affective disorder, as well as occasional feelings of being “blue or sad” (National Institute of Mental Health 2011). It is also important to note that female participants in the depression group expressed higher willingness to seek help via talking to their friends, and this was the case for females in the ADHD group as well. During the adolescent quest for increased autonomy, the role of peers or friends becomes more prominent. Thus, it is not surprising that study participants perceive they can resolve depression themselves with the assistance of a friend who can offer authentic empathy and validation. These findings suggest that school-based, mental health peer-support programs with professional guidance and supervision (Robinson et al. 2010) might be an effective strategy to increase the number of youth who actually seek and engage in formal treatment.

### Race/Ethnicity

The findings related to race/ethnicity and help-seeking, although somewhat complex, are interesting to ponder, especially given the national focus on reducing disparities related to health and mental health services. Compared to African Americans and Hispanics, white respondents were more likely to select *talk to parents* or *talk to a doctor* as help-seeking strategies. African American participants were more likely than all other ethnic groups to choose *pray* as a help-seeking strategy. Although previous research has found that praying is widely utilized by

African-Americans for dealing with mental health issues (Ellison and Taylor 1996; Ellison et al. 2001; Givens et al. 2007), those findings were derived from research with adult populations. The current study provides evidence that praying is a popular coping strategy for mental illness among African American youth, also. Although this coping strategy by itself may not be sufficient to ensure optimum outcomes, it is suggested that if formal mental health services were accompanied by praying, mental health practitioners working with African American youth might achieve better treatment outcomes. These findings also indicate that church-based mental health outreach services might be especially effective for African American youth.

Overall, among Asian/Pacific Islander (API) youth, more respondents favored *talk to a friend* than any other help-seeking item. Compared to the other race/ethnic groups, API participants who were asked to imagine having depression indicated the highest preference for the *wait* item, while the mean scores of all other groups indicated that they would *not* wait for their target conditions to go away. This finding is consistent with Chen's study (2005, p. 1064), which found that when seeking help for mental health needs, "APIs rely first on themselves to deal with any [mental] distress, and only secondarily consider seeking help from friends or family members... Seeking professional care for mental health needs is the last choice for APIs." Overall, API participants had the lowest score on the *pray* item among all racial/ethnic categories; but, interestingly APIs who were asked to hypothesize having ADHD exhibited the second highest mean score on *pray*, following African-American participants in the depression group. Although racial/ethnic differences in treatment rates for ADHD were previously documented (Bussing et al. 2005; Bussing et al. 2003a, b), to our knowledge, there is no study focused on the meaning of having ADHD for API youth. Social norms that classify particular behaviors as undesirable or deviant are an important contextual factor that has significant impact on problem perception and help-seeking preferences. It is possible that the subjective meaning of ADHD among APIs may differ substantially from the meaning assigned by other race/ethnic groups. It is important for youth health practitioners to better understand API cultural influences that may affect mental health help seeking, but practitioners should also be aware that API groups are heterogeneous. Factors such as immigration history, country of origin, and cultural beliefs about causes of mental distress may affect help-seeking intentions and behaviors.

These differences among race/ethnic groups suggest that important cultural forces may contribute to differences in help-seeking intentions and behaviors, along with system-level factors such as access to care, cost, acceptability and cultural relevance of services, among others. As Cauce

et al. (2002) suggest, it is important to understand the cultural influences that affect the family and the individual's perception of need for help in order to understand these disparities. Understanding the interplay of cultural influences and policy-relevant aspects of the mental health care system will require a mixture of research approaches, including qualitative research.

#### Diagnosed/Non-Diagnosed

In regression analyses, differences between *diagnosed* and *non-diagnosed* respondents were apparent with regard to beliefs about the likelihood of improvement in accounting for traditional help-seeking. *Non-diagnosed* respondents who believed their condition would improve if they were to *see a psychologist*, or *take medication* reported higher *traditional help-seeking* intent; however, this was not true for those who had been *diagnosed*. At the bivariate level, *diagnosed* youth were more likely to choose *wait* than those who were *non-diagnosed*. Help-seeking items asked participants to imagine their behavior if they had the target condition, so for the *non-diagnosed*, responses are more hypothetical. These results suggest that non-diagnosed participants are more optimistic about the outcomes of using professional or formal mental health services. The prospective aspect of this study may be helpful in identifying youth-level factors that facilitate professional mental health care utilization among youth. Thus, community-based outreach efforts to improve mental health related knowledge including treatment options may play an important role in increasing help-seeking and addressing the high level of unmet need in the treatment of mental disorders among youth.

On the other hand, the *diagnosed* may have already entered the mental health treatment system and have likely faced decisions about help-seeking similar to the content of these items. The study finding, which indicated that *diagnosed* African American respondents were less likely to endorse *traditional help-seeking*, requires careful examination of system-level factors including perceived discrimination. Among all respondents, stigma was found to be negatively associated with *traditional help-seeking*, however, interestingly, stigmatization of depression (i.e., the interaction term of depression by stigma) was associated with higher *traditional help-seeking* among those diagnosed with depression. The high level of perceived stigmatization among those reporting a depression diagnosis is of particular concern. It may be that the behaviors related to ADHD (inattention, disorganization, and possible disruptive behavior) occur from time to time in all children, and thus may be seen as more *normal* than the symptoms of depression. Research to understand the development of stigmatization associated with various diagnoses, or sets of

behavior, is necessary in order to develop targeted strategies to reduce perceived stigmatization associated with the various mental health conditions of young people.

### Study Strengths and Limitations

Using the TPB (Ajzen 1991) as a conceptual frame, study findings provide insights into how young people's attitudes toward help-seeking behaviors (i.e., *perceived likelihood of improvement*), subjective norms with respect to the behavior (i.e., *social distance, perceived family attitude*, and cultural influences), and perceived behavioral control (i.e., family medical history with ADHD or depression) explain help-seeking intentions. Since this study focused on youth-level factors, study findings present a richness of responses from youth aged 10–18 years on a variety of perceptions regarding mental health care conditions and sources of help. While this is a strength of the study, it is a limitation as well due to the exclusion of family/system level factors (e.g., resources to access care, accessibility of health care, etc.) which may substantially affect young people's help-seeking intentions. Although intentions were found to predict help-seeking behaviors with considerable accuracy, using a longitudinal study design, future research studies could provide further insight into the causal relations between intention and planned behavior among youth who are going through rapid developmental changes.

Related to the data collection method, some important limitations of the present study need to be acknowledged. This sample of young people were randomly selected from the *Harris Interactive children's panel* comprised of the children of more than 6 million adult panel members who had agreed to participate in its surveys. The size of this panel and the weighting process does not fully mitigate the fact that youth who participate in these surveys might be different from those who do not. Study data were collected through an Internet-based survey, which means that children without Internet access were excluded, and study findings may not generalize to young people without Internet access and/or who are not inclined to respond to surveys. The vignette used in this study was not gender counter-balanced. The vignette utilized a male's name (Michael) and the name was not changed to a female name when the respondent was female, which could have affected how girls and boys differentially answered questions. It is recommended that future research utilize gender appropriate vignettes to collect data. In addition, the data were self-reported including responses about whether respondents had been diagnosed with a mental health condition. Future studies of differences related to being diagnosed/non-diagnosed should verify diagnosis with clinical assessments or clinical records, and ideally, should

strive to connect help-seeking intentions with actual help-seeking behaviors.

### Conclusion

While the findings of this study provide practitioners and researchers with fresh evidence on what youth-level factors are associated with a range of help-seeking intentions, they also illustrate the challenges involved in better understanding the complexity of the help-seeking process among youth in the context of ADHD and depression. It is clear that there is an urgent need for more research to further improve our understanding of youth-level factors affecting how young people perceive different sources of help. With increased understanding of youth's perceptions and the complexity of their help-seeking behavior, community-based efforts to develop effective strategies that support active help-seeking behavior and eliminate barriers to appropriate care can have a greater likelihood of success.

### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Armitage, C., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta analytic review. *British Journal of Social Psychology*, 40, 471–499.
- Ballon, B., Kirst, M., & Smith, P. (2004). Youth help-seeking expectancies and their relation to help-seeking behaviours for substance use problems. *Addiction Research and Theory*, 12, 241–260.
- Barker, G. (2007). *Adolescents, social support and help-seeking behavior*. Geneva: World Health Organization.
- Biddle, L., Donovan, J., Sharp, D., & Gunnell, D. (2007). Explaining non-help-seeking amongst young adults with mental distress: A dynamic interpretive model of illness behavior. *Sociology of Health & Illness*, 29, 987–1002.
- Borgers, N., de Leeuw, E., & Hox, J. (2000). Children as respondents in survey research: Cognitive development and response quality. *Bulletin de Methodologie Sociologique*, 66, 60–75.
- Burns, J., & Rapee, R. (2006). Adolescent mental health literacy: Young people's knowledge of depression and help seeking. *Journal of Adolescence*, 29, 225–239.
- Bussing, R., Gary, F., Mills, T., & Garvan, C. (2003a). Parental explanatory models of ADHD: Gender and cultural variations. *Social Psychiatry and Psychiatric Epidemiology*, 38, 563–575.
- Bussing, R., Koro-Ljungberg, M., Gary, F., Mason, D., & Garvan, C. (2005). Exploring help-seeking for ADHD symptoms: A mixed-methods approach. *Harvard Review of Psychiatry*, 13, 85–101.
- Bussing, R., Zima, B., Gary, F., & Garvan, C. (2003b). Barriers to detection, help-seeking, and service use for children with ADHD symptoms. *The Journal of Behavioral Health Services & Research*, 30, 176–189.
- Cauce, A., Paradise, M., Domenech-Rodriguez, M., Cochran, B., Shea, J., Srebnik, D., et al. (2002). Cultural and contextual influences in mental health help seeking: A focus on ethnic

- minority youth. *Journal of Consulting and Clinical Psychology*, 70, 44–55.
- Chen, H. (2005). Mental illness and principal physical diagnoses among Asian American and Pacific Islander users of emergency services. *Issues in Mental Health Nursing*, 26, 1061–1079.
- Cohen, A., Medlow, S., Kelk, N., & Hickie, I. (2009). Young people's experiences of mental health care. *Youth Studies Australia*, 28, 13–20.
- Coleman, D., Walker, J., Lee, J., Squire, P., & Friesen, B. (2009). Children's causal beliefs about childhood depression and ADHD: Stigmatization, demographics, and role of contact in a national sample. *Psychiatric Services*, 60, 950–957.
- Corrigan, P., Kerr, A., & Knudsen, L. (2005). The stigma of mental illness: Explanatory models and methods for change. *Applied and Preventive Psychology*, 11, 179–190.
- Council of American Survey Research Organizations. (1997–2011). *CASRO code of standards and ethics for survey research*. Retrieved June 1, 2011, from <http://www.casro.org/codeofstandards.cfm>.
- Ellison, C., Boardman, J., Williams, D., & Jackson, J. (2001). Religious involvement, stress, and mental health: Findings from the 1995 Detroit Area Study. *Social Forces*, 80, 215–249.
- Ellison, C., & Taylor, R. (1996). Turning to prayer: Social and situational antecedents of religious coping among African Americans. *Review of Religious Research*, 38, 111–131.
- Exley, B. (2005). *The behavioral 'crisis': Young children's misunderstanding of the identities of ADHD*. Sydney, Australia: Paper presented at the International Education Research Conference of the Australian Association for Research in Education.
- Fox, C., Buchanan-Barrow, E., & Barrett, M. (2008). Children's understanding of mental illness: An exploratory study. *Child: Care Health & Development*, 34, 10–18.
- Gaston, G., & Gerjo, K. (1996). The theory of planned behavior: A review of its applications to health-related behaviors. *American Journal of Health Promotion*, 11, 87–98.
- Givens, J., Houston, T., Van Voorhees, B., Ford, D., & Cooper, L. (2007). Ethnicity and preferences for depression treatment. *General Hospital Psychiatry*, 29, 182–191.
- Hennessy, E., Swords, L., & Heary, C. (2008). Children's understanding of psychological problems displayed by their peers: A review of the literature. *Child: Care, Health & Development*, 34, 4–9.
- Jaycox, L., Asarnow, J., Sherbourne, C., Rea, M., LaBorde, A., & Wells, K. (2006). Adolescent primary care patients' preferences for depression treatment. *Administration and Policy in Mental Health and Mental Health Services Research*, 33, 198–207.
- Jorm, A., & Oh, E. (2009). Desire for social distance from people with mental disorders: A review. *Australian and New Zealand Journal of Psychiatry*, 43, 183–200.
- Kisch, J., Leino, V., & Silverman, M. (2005). Aspects of suicidal behavior, depression, and treatment in college students: Results from the Spring 2000 National College Health Assessment Survey. *Suicide and Life-Threatening Behavior*, 35, 3–13.
- Lauber, C., Nordt, C., Falcato, L., & Rossler, W. (2004). Factors influencing social distance toward people with mental illness. *Community Mental Health Journal*, 40, 265–274.
- Martin, J., Pescosolido, B., Olafsdottir, S., & McLeod, J. (2007). The construction of fear: American's preferences for social distance from children and adolescents with mental health problems. *Journal of Health and Social Behavior*, 48, 50–67.
- National Institute of Mental Health. (2011). *Depression*. NIH Pub. No. 11-3561. Rockville, MD.
- Pescosolido, B., Jensen, P., Martin, J., Perry, B., Olafsdottir, S., & Fettes, D. (2008). Public knowledge and assessment of child mental health problems: Findings from the National Stigma Study-Children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 339–349.
- Rickwood, D., Deane, F., & Wilson, C. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia*, 187, S35–S39.
- Rickwood, D., Deane, F., Wilson, C., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australia e-Journal for the Advancement of Mental Health*, 4, 1–34.
- Rideout, V. (2001). *Generational Rx.com: How young people use the internet for health information*. Kaiser Family Foundation. Retrieved November 1, 2011, from <http://www.kff.org/entmedia/upload/Toplines.pdf>.
- Robinson, J., Bruxner, A., Harrigan, S., Bendall, S., Killackey, E., Tonin, V., et al. (2010). Study protocol: The development of a pilot study employing a randomized controlled design to investigate the feasibility and effects of a peer support program following discharge from a specialist first-episode psychosis treatment centre. *BMC Psychiatry*, 10, 1–7.
- Schonert-Reichl, K., Offer, D., & Howard, K. (1995). Seeking help from informal and formal resources during adolescence: Sociodemographic and psychological correlates. *Adolescent Psychiatry*, 20, 165–178.
- Sheffield, J., Fiorenza, E., & Sofronoff, K. (2004). Adolescents' willingness to seek psychological help: Promoting and preventing factors. *Journal of Youth and Adolescence*, 33, 495–507.
- Skinner, H., Biscope, S., Poland, B., & Goldberg, E. (2003). How adolescents use technology for health information: Implications for health professionals from focus group studies. *Journal of Medical Internet Research*, 5, e32.
- Steinberg, L., & Morris, A. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83–110.
- Sullivan, K., Marshal, S., & Schonert-Reichl, K. (2002). Do expectancies influence choice of help-giver? Adolescents' criteria for selecting an informal helper. *Journal of Adolescent Research*, 17, 509–531.
- Swords, L., Hennessy, E., & Heary, C. (2011). Adolescents' beliefs about sources of help for ADHD and depression. *Journal of Adolescence*, 34, 485–492.
- Thompson, E., Mazza, J., Herting, J., Randell, B., & Eggert, L. (2005). The mediating roles of anxiety, depression, and hopelessness on adolescent suicidal behaviors. *Suicide and Life-Threatening Behavior*, 35, 14–34.
- Thorell, L., & Dahlstrom, K. (2009). Children's self-reports on perceived effects on taking stimulant medication for ADHD. *Journal of Attention Disorders*, 12, 460–468.
- Thurston, I., & Vicky, P. (2008). Mental health service utilization among African American and Caucasian mothers and fathers. *Journal of Consulting and Clinical Psychology*, 76, 1058–1067.
- Walker, J., Coleman, D., Lee, J., Squire, P., & Friesen, B. (2008). Children's stigmatization of childhood depression and ADHD: Magnitude and demographic variation in a national sample. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1–9.
- Wood, A., & Wahl, O. (2006). Evaluating the effectiveness of a consumer-provided mental health recovery education presentation. *Psychiatric Rehabilitation*, 30, 46–52.
- Ybarra, M., & Suman, M. (2006). Help seeking behavior and the internet: A national study. *International Journal of Medical Informatics*, 75, 29–41.