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"Me" versus "them": How mental illness stigma influences adolescent help-seeking behaviors for oneself and recommendations for peers

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Abstract

Mental illness stigma is a significant barrier to utilizing mental health services for young populations. Few studies have evaluated how specific stigma dimensions relate to help-seeking and recommendations among adolescents. We examined how the stigma dimensions of labeling, stereotypes, and separation/discrimination influenced self-reported help-seeking behaviors of adolescents and recommendations for hypothetical peers with a mental health problem. Longitudinal data (four assessments) from a study evaluating the effectiveness of three anti-stigma interventions (curriculum, contact, materials, versus control) among adolescents were analyzed (n=396). Help-seeking outcomes comprised services in formal (e.g., doctor), informal (e.g., friend), or school-based (e.g., school counselor) settings. Generalized estimating equations tested associations of labeling, stereotypes, and separation/discrimination on help-seeking for a personal problem and recommendations for vignette characters described as having bipolar depression or social anxiety disorder. Adolescents were more likely to make help-seeking recommendations for peers with mental health problems than they were to seek help for a problem of their own. Labeling was a strong predictor of self-reported help-seeking and recommendations. Mental health literacy, an indicator for low negative stereotypes, was related to increased recommendations but not self-reported help-seeking. Positive stigma action and awareness—high cognizance of stigma and how to engage in proactive behaviors towards treating and destigmatizing mental illness—increased help-seeking in formal and informal settings for oneself. Finally, separation/discrimination did not prevent self-reported help-seeking, but it did increase peer recommendations in certain settings. Stigma did not always influence or interfere with help-seeking in the same way when the help-seeker was oneself versus a peer.

Keywords: Mental illness stigma, adolescents, help-seeking behaviors, referrals

‘Me’ vs. ‘Them’: How Mental Illness Stigma Influences Adolescent Help-Seeking Behaviors for Oneself and Recommendations for Peers

Mental illness stigma is a substantial barrier to mental health treatment among adolescents (Burns & Rapee, 2006; Clement et al., 2015). Fewer than half of adolescents with a mental disorder in the United States receive formal treatment (Olfson, Druss, & Marcus, 2015), despite the availability of effective treatments (Chorpita et al., 2011). The existing adolescent mental health help-seeking literature emphasizes the role of stigma in shaping how gatekeepers (e.g., parents) engage mental health services for adolescents (Dempster, Wildman, & Keating, 2013; Villatoro, DuPont-Reyes, Phelan, Painter, & Link, 2018). Yet, adolescents may also seek help on their own—that is, engage in personal help-seeking behaviors—as informal supports (e.g., from a friend) are often endorsed or preferred by adolescents (Burns & Rapee, 2006; Calear, Batterham, Torok, & McCallum, 2021; Coles et al., 2016; Singh, Zaki, & Farid, 2019; Yap, Reavley, & Jorm, 2013; Yap, Wright, & Jorm, 2011). Moreover, understanding stigma’s influence on help-seeking among adolescents has been limited to treatment-related attitudes and intentions rather than reports of actual help-seeking (e.g., Calear et al., 2021; Clark, Hudson, & Haider, 2020; Yap et al., 2013), overlooking stigma’s influence in blocking or initiating personal help-seeking. This leaves an important question unanswered: How does stigma influence adolescents’ own attempts to seek help for mental health concerns in various settings?

Help-seeking rarely occurs in isolation as recommendations from family and peers can facilitate entry into care for adolescents (Rickwood, Mazzer, & Telford, 2015). Moreover, adolescents are able to make appropriate help-seeking recommendations for peers with a mental health illness (Calear et al., 2021; Singh et al., 2019; Yap et al., 2013). Stigma may differentially affect how adolescents respond to their own mental health needs versus those of their peers. Such

examination of stigma for oneself versus others is rare, particularly among adolescents, leading to our next important unanswered question: Does stigma affect help-seeking differently when the target is oneself versus others? The current study examines how the domains of stigma—labels, stereotypes, and separation/discrimination— influence adolescent help-seeking decisions. We center our argument by first considering stigma's influence on adolescent help-seeking behaviors for oneself versus help-seeking recommendations for peers.

Conceptualizing Mental Illness Stigma in the Context of Help-Seeking

Stigma is the convergence of multiple interrelated dimensions: labeling, stereotypes, separation, and discrimination (Link & Phelan, 2001). Labeling, the recognition of a mental health problem whether in one-self or others, distinguishes between persons with and without mental health issues, setting in motion how labeled individuals see themselves and get treated by society. While labels raise awareness of a problem and motivate treatment-seeking among adolescents (Moses, 2009; Wright, Jorm, & Mackinnon, 2012), these labels also can be attached to negative stereotypes, creating separation between those with and without a label ("us" versus "them"; Link & Phelan, 2001). Link and Phelan (2013) have referred to labeling as involving a "package deal" that confers both positive and negative consequences. The culmination of these stigma dimensions coalesces with labeled persons being treated differently and experiencing negative consequences such as increased separation and discrimination from others. Collectively and individually, these stigma dimensions can undermine help-seeking because they can influence individual attitudes surrounding mental illnesses and their treatment, which in turn can prompt or thwart help-seeking behaviors and referrals (Corrigan, Druss, & Perlick, 2014).

Mental Illness Labels and Help-Seeking Behaviors

Self-labeling a mental health problem can be a double-edge sword. One side of the sword is the potential of receiving help through treatment. A strong predictor of treatment initiation is labeling, as it provides a person with important information on what the issue is and how it can be addressed (Moses, 2009; Wright et al., 2012; Wright, Jorm, & Mackinnon, 2011). However, the other side of the labeling sword is the possibility of developing self-stigma or being stigmatized by others. The mere act of seeking help can become a mechanism for revealing one's condition to others, which can then alter how people with mental health problems are treated by society. This realization that labeling can also invite stigma may dissuade personal help-seeking behaviors among adolescents in order to avoid the label and the potential deleterious effects of stigma on their lives (e.g., low self-esteem, judgment).

By contrast, labeling a mental illness in others may have fewer costs. Vignette-based empirical approaches—descriptions of hypothetical persons experiencing specific mental health symptoms—are commonly used to examine stigma among adolescents. In general, labels may be easier to apply to a hypothetical peer than to one-self because any potential stigma attached to labels is not conferred on the self but instead applied to the peer. This occurs among parents where labels are more readily applied when the child is outside the family versus one of their own (Villatoro et al., 2018). For adolescents, the ability to accurately label vignette characters as having a mental illness is generally associated with greater help-seeking recommendations for the character, but not always as it may depend on the type of mental illness the character is dealing with (Coles et al., 2016; Yap et al., 2013; Yap et al., 2011). Although depression is more likely to be recognized by adolescents than anxiety, accurate labeling in peers does not necessarily lead to greater help-seeking recommendations for anxiety problems as it does for peers with depression (Coles et al., 2016). While labeling can be expected to influence help-

seeking in general, labeling may facilitate referrals to mental health support more easily than engage adolescents in personal help-seeking behaviors, as other stigma factors (e.g., discrimination, stereotypes) may play a larger role in determining help-seeking for the self.

Mental Health Literacy and Help-Seeking Behaviors

The influence of mental health stereotypes on help-seeking may function similarly if the actions are directed towards oneself or peers. Mental illness stereotypes—generalized characterizations of people with a mental illness and the accurate understanding of mental illness symptoms, their etiology, and treatment—are deep-rooted in mental health literacy (Calear et al., 2021; Singh et al., 2019). Assessing stereotypes are necessary to knowing mental health literacy's influence on help-seeking because they represent cognitive knowledge structures in the general public that influence if, when, how, and where help is sought (Link, Yang, Phelan, & Collins, 2004). On the whole, adolescents with high mental health literacy and positive attitudes towards mental illnesses (e.g., people with a mental illness are able to help others) tend to have more positive beliefs about treatment, are more receptive to engage in help-seeking for mental health problems of their own, and are able to distinguish between the types of mental health services that could be sought (Calear et al., 2021; Coles & Coleman, 2010; Coles et al., 2016). These patterns are similar for peer help-seeking recommendations (Schnyder, Panczak, Groth, & Schultze-Lutter, 2017; Singh et al., 2019). In contrast, negative attitudes and stereotypes (e.g., people with a mental illness are dangerous/unpredictable) are associated with a disinclination to believe that formal help-seeking will be helpful but associated with higher intentions for certain types of informal help-seeking (Yap et al., 2013; Yap et al., 2011).

Separation and Discrimination and Help-Seeking Behaviors

Commonly measured as social distance—a person's level of willingness to interact with a stigmatized person in different contexts (Link et al., 2004), separation/discrimination may result in detrimental effects on the self (Link & Phelan, 2013) and deter help-seeking. Discrimination towards persons with a mental illness are often associated with low rates of personal help-seeking (Schnyder et al., 2017). Among adolescents, greater social distance towards people with mental illness is associated with lower beliefs in the helpfulness of and intentions to use specialty care (Yap et al., 2013). How social distance influences these beliefs and intentions also may vary by type of mental illness (Yap et al., 2013). Additionally, for adolescents, social distance may be an even greater barrier to informal care than formal care (Yap 2011).

While separation/discrimination may deter help-seeking for the self, these attitudes and behaviors may have limited or alternative bearing on help-seeking recommendations for peers and may hinge on the type of services being recommended. For example, separation may increase recommendations for peers to seek primary or specialty care. This may be due to the recommender perceiving the person with a mental health problem as "undesirable" and therefore believing that professional support may be beneficial in reducing symptomatology and increasing social appeal. In contrast, separation/discrimination could prevent peer referrals for some types of informal help. Extant research demonstrates the power of stigma by association: the mere connection to someone with a mental illness can lead to stigmatization, distress, and low quality of life for the affiliated person, most especially among family members (Östman & Kjellin, 2002; van der Sanden, Pryor, Sutterheim, Kok, & Bos, 2016). Stigma by association could also extend to friends and peers who can potentially serve as informal supports. When separation and discrimination are high, adolescents may be reluctant to recommend that peers seek informal support from friends or family because of the realization that any involvement

with the labeled peer can trigger stigmatizing consequences to the informal helper, expressly in situations where the mental illness label may be perceived as "more serious."

Purpose of the Study

Using longitudinal data from a school-based anti-stigma intervention study, this study examined how the stigma dimensions of labeling, stereotypes, and separation/discrimination were related to personal help-seeking behaviors (operationalized as self-reported help-seeking) and help-seeking recommendations for peers across various settings, including formal treatment, informal support, and school-based services. The study builds on the existing literature by (1) examining the associations of multiple dimensions of stigma to adolescent mental health help-seeking in various service settings, and (2) by examining these associations for help-seeking when the recipient is oneself ('me') vs. a peer ('them'). The latter distinction between self-reported help-seeking behaviors versus recommending help for someone else is important to make because help-seeking processes are not conducted in a vacuum and involve multiple actors (Cauce et al., 2002; Pescosolido & Boyer, 2010). Furthermore, how stigma dimensions interfere with help-seeking decisions and recommendations may depend on who stands to lose from being stigmatized—the help-seeker or the recommender. Finally, the longitudinal design permitted the examination of potential time trend differences in the influence of stigma on help-seeking. Given these considerations, we test the following hypotheses:

Hypothesis 1: Labeling is expected to be a more consistent predictor of peer help-seeking recommendations than help-seeking for oneself. That is, while labeling in general is likely to increase self-reported help-seeking behaviors and peer recommendations, fewer significant associations may be found between self-labeling and self-reported help-seeking because self-labeling is anticipated to act as a double-edge sword for the self.

Hypothesis 2: Low endorsement of negative stereotypes will be associated with both increased self-reported help-seeking behaviors and peer recommendations.

Hypothesis 3: Separation/discrimination will dissuade adolescents from engaging in help-seeking behaviors for themselves as a way to avoid stigmatization. In contrast, separation/discrimination will increase peer recommendations to formal and school-based services but reduce recommendations for informal supports because lay providers may become stigmatized by association.

The current study expands our knowledge of stigma's role in shaping adolescent help-seeking behaviors, not only from the perspective of adolescents seeking help for a problem of their own but also advising peers in need of support. Understanding the distinct functions of stigma in these contexts is important to developing anti-stigma interventions that minimize stigma barriers to help-seeking in social networks.

Methods

Data

Data were used from a school-based study among sixth-graders that examined the longitudinal effects of three anti-stigma interventions—a stigma-focused teacher-led curriculum, a contact intervention with a young adult, and/or exposure to stigma materials in the classroom (Link et al., 2020; Painter et al., 2017). For more information on the interventions, see Appendix A. Briefly, 14 schools from an urban/suburban school district in Texas were randomly assigned to receive a single intervention or a combination of these interventions. All sixth-grade students and parents within each school were invited to participate in pre- and one-month post-test computer-based assessments (Phase 1: n=751, 60% response rate) as well as longitudinal follow-up assessments at their homes six-, 12-, 18-, and 24-months post-intervention (Phase 2: n=489,

65% response rate). The current study uses longitudinal data from the Phase 2 sample. Each longitudinal assessment included measures of distinct stigma domains, mental health symptoms, help-seeking behaviors, and vignette-based stigma and help-seeking referrals. Informed consent/assent were obtained after procedures were explained. The study was approved by the Institutional Review Boards of MHMR of Tarrant County and Columbia University Medical Center.

Sample

Participants were representative of the local public school population in terms of race/ethnicity (Texas Education Agency, 2011): Latino/Hispanic (48% sampled; 50% Texas-wide), non-Latino Black/African American (21% sampled; 13% Texas-wide), and non-Latino white/White (25% sampled; 32% Texas-wide). The sample was 55.8% female and socioeconomically diverse (Table 1): nearly 30% reported household incomes under $20,000, almost one-third reported incomes between $20,000-$39,999, approximately 20% between $40,000-$74,999, and another 20% greater than $75,000. In 2011, the national household median income was $50,502, comparable to the Texas household median of $49,392 (Noss, 2012).

[Insert Table 1 about here]

The role of stigma on help-seeking for oneself and peers was examined using two analytical samples. As adolescents with greater mental health need may benefit most from help-seeking, we examined self-reported help-seeking behaviors in the subsample of adolescents who reported high symptoms at any point during the two-year study (n=248). A self-reported 23-item symptoms checklist (0=*No*, 1=*Yes*) at the pre-test, post-test, 18-month, and 24-month follow-up assessments measured mental health need. A credentialed mental health social worker created the screen using gate questions from the Major Depressive Episode, Anxiety Disorders,

Attention-Deficit/Hyperactivity Disorder, and Whole Life modules of the Diagnostic Interview Schedule for Children, Version IV, a validated structured interview for assessing childhood mental disorders (DISC-IV; Shaffer et al., 2000). Exploratory factor analyses revealed one global mental health factor. A total symptoms score was calculated (*alpha*=0.91; *omega*=0.90). Adolescents who rated their mental health in the top-tertile of number of symptoms at any point throughout the study were categorized as having high symptoms; those in the bottom- and/or middle-tertiles at all study waves were designated as low-symptom. On average, those in the high-symptom subsample endorsed almost four times as many symptoms (*M*=9.57, *SD*=5.29) as those in the bottom/middle-tertiles combined (*M*=2.56, *SD*=2.38). Furthermore, the screening tool shows evidence for construct validity as it has been previously shown to coincide with the experiences of people with a mental illness (e.g., high help-seeking behaviors, violence victimization etc.; Painter et al., 2017; Link et al., 2020). Finally, peer referrals of vignette characters were examined using longitudinal data from the total Phase 2 sample (*n*=436).

Measures

Self-Reported Help-Seeking Behaviors. During each assessment, participants were asked if they talked to a doctor, mental health specialist, parent, friend, clergy member, or school counselor for a personal mental health concern (0=*No*, 1=*Yes*). They were also asked if they had taken any medication for a mental health problem (0=*No*, 1=*Yes*). Three separate help-seeking outcomes were developed: formal services (doctor, specialist, medication), informal support (parent, friend, clergy), and school-based counselor. For formal services and informal support, their respective items were combined to create counts of the number of help-seeking behaviors the adolescent partook (range: 0-3). Utilizing count versus binary outcomes allowed us to obtain a more nuanced measure of the adolescent's own help-seeking engagement. The one item

assessing school-based help-seeking was treated as a dichotomous outcome. At each assessment, personal help-seeking behaviors were measured midway through the survey but before querying adolescents about their own mental health symptoms, which came at the end of the survey.

Peer Help-Seeking Recommendations. Participants were presented with vignette characters at each longitudinal assessment that described hypothetical peers meeting diagnostic criteria based on the Diagnostic and Statistical Manual of Mental Disorders, IV (American Psychiatric Association, 2000) for bipolar disorder with manic symptoms (Julia) and social anxiety (David). The vignettes were drawn from previously validated studies and measures used in young populations (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Pescosolido et al., 2008). The characters were designed to be neutral with respect to race/ethnicity. The use of vignettes in understanding patterns of mental illness stigma and help-seeking are methodologically advantageous because all respondents receive and react to the same stimuli, thereby providing more precise information on what factors solicit specific reactions (Link et al., 2004). Vignettes were presented at the midway point of each assessment by first introducing Julia then followed by David. After reading each vignette, participants were asked to indicate whether they believed Julia/David should engage in specific help-seeking behaviors; the items were similar to the personal help-seeking items. For each character, help-seeking referral items were aggregated to create parallel outcomes to personal help-seeking in formal (range: 0-3), informal (range: 0-2; help from family or friends was asked as a single question), and school-based services (0=*No*, 1=*Yes*).

Mental Illness Stigma. The stigma dimensions assessed included labeling, stereotypes, and separation/discrimination. First, *self-labeling* was measured by a single item: "Was there a time in the past six months, when you seemed to have an emotional or behavioral problem like

being anxious, depressed, hyperactive, withdrawn, or always getting into trouble?" (0=*No*, 1=*Yes*). *Labeling* in the vignette characters was assessed by asking respondents if they believed Julia/David was experiencing a mental illness (0=*No*, 1=*Yes*).

Second, adapted from Wahl et al. (2011), a 24-item instrument assessed *mental health knowledge and positive attitudes*. Knowledge was assessed by objective statements ("A mental illness is caused by something genetic or hereditary") while attitudes capturing stereotypes were assessed via opinion statements ("A person with a mental illness is able to be a good friend"). Respondents indicated the degree to which they agreed with each statement (1=*Strongly disagree* to 5=*Strongly agree*). Exploratory factor analyses revealed a one-factor scale, and an overall mean score was calculated (*alpha*=0.77), where higher scores represented greater knowledge/positive attitudes. Stereotyping was also assessed by an adapted version of the Actions Relating to Mental Illness instrument (Painter et al., 2017; Wahl et al., 2011), which measures a participant's recognition of stigma towards persons with a mental illness, engagement in proactive behaviors towards treating and destigmatizing mental illness, and avoidant behaviors towards people with a mental illness over the last six months (0=*No*, 1=*Yes*). Exploratory factor analyses revealed three subscales: *stigma awareness/action*, avoidance, and negative portrayals of mental illness. The stigma awareness/action subscale was specifically used in the analyses because the scale assessed the adolescent's ability to encourage behaviors that promote help-seeking and destigmatize mental illness, an indicator of low negative stereotypes (e.g., *I encouraged a friend or relative to speak to a counselor or therapist*). Items were summed; higher scores indicated greater awareness/action (*alpha*=0.64; *omega*=0.69).

Lastly, *social distance*, adapted from Wahl et al. (2011) , measured the adolescent's level of willingness to interact with individuals with a "mental illness" in six social situations (e.g. sit

next to them in class; 1=*Definitely yes* to 4=*Definitely no*). Mean scores were computed with higher scores being suggestive of high desire to separate from peers with a mental illness (*alpha*=0.91; *omega*=.90). Relatedly, *vignette-based social distance* was assessed for each character by reporting the extent participants would interact with Julia/David in the same situations previously described (*alphas*=0.92 and 0.90, respectively; *omega*=.91 for both). Higher scores suggested greater social distance. Respondents also completed a six-item scale assessing *avoidance* of persons "with mental health problems" in the last six-months (0=*No*, 1=*Yes*; e.g., "I avoided a person who said odd things and behaved in strange ways"). Responses were summed and dichotomized (0=*None*, 1=*Any avoidance*) because few participants reported more than one avoidant event.

Covariates. Analyses controlled for adolescent and family characteristics: gender (female—referent), race/ethnicity (non-minority—referent), and household income (less than $40k—referent). Familiarity with mental illness was assessed using an abbreviated version of the Level of Contact Report (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999) that asked about degree of exposure to people who have a mental illness across five levels: seeing a mentally ill person on television (least contact); having a classmate, friend, or relative with a mental illness; and living with someone who has a mental illness (most contact). A ranked familiarity score was created (0=*No contact* to 5=*Most contact*). The analyses also control for intervention assignment (No Intervention Control—referent) and time to adjust for possible changes in help-seeking due to the interventions and study period. The help-seeking recommendations analyses adjusted for the adolescent's perceived seriousness of Julia's/David's condition (1=*Not at all* to 4=*Very likely*). All analyses also controlled for parental perceptions of mental health problems in the vignette characters and their child, as parent-adolescent concordance in these perceptions (when

both parents and adolescents perceive a problem) may be crucial to initiating help-seeking in services that require parental gatekeeping. Problem perceptions were measured using a single-item that paralleled the adolescent self-perceived problem variable. Half of parents who perceived a mental health problem in their child were concordant with their child's self-perception. Finally, all analyses adjusted for baseline values of the outcomes.

Data Analysis

To examine how stigma is related to help-seeking for oneself, the subsample of adolescents who scored in the top-tertile of the symptoms checklist at any point during the study were analyzed. For the formal and informal help-seeking outcomes, count generalized estimating equations (GEE) with a log-link function and poisson family were used as there was no evidence of overdispersion and to account for repeated observations over time. Binomial GEE models examined school-based help-seeking. Models adjusted for mental illness familiarity, parent perception of their child's mental health, adolescent and family characteristics, intervention assignment, study wave, and baseline help-seeking.

Analyses of help-seeking recommendations for Julia (bipolar disorder) and David (social anxiety disorder) were conducted separately using the same statistical procedures as used for self-reported help-seeking. The effect of stigma on help-seeking recommendations for the vignette characters was examined among the total Phase 2 sample. For formal and informal recommendations, count GEE regressions were performed and controlled for mental illness familiarity, adolescent and family characteristics (gender, race/ethnicity, and household income), character's perceived seriousness, intervention assignment, study wave, parental perceived mental health problem of the character, and baseline help-seeking recommendations. Similar binary GEE models were performed for the dichotomous school-based help-seeking outcome.

For all analyses, stigma variables were entered first, followed by the covariates. Although exploratory analyses revealed one global mental health symptom factor, we developed subscales for depression, anxiety, and attention symptoms to test their direct effects on help-seeking and their potential interactions with the stigma domains on help-seeking. Type of symptoms was not associated with any personal help-seeking outcomes. Of the 30 interactions tested, only six were statistically significant. Further inspection of these six interactions in post-hoc analyses revealed that these effects were potentially artifactual given small cell sizes. For parsimony, Table 2 only presents the main effect models excluding type of symptoms. Finally, we also examined potential time differences in the stigma effects on help-seeking by examining (1) main effects and (2) interactions between the stigma domains and time. Overall, there were no statistically significant differences in youth help-seeking behaviors over time, and there was no evidence of interactions between stigma and time. Statistically significant interaction terms were rare, and post-hoc tests suggested that these differences were in fact not statistically significantly and were likely artifactual. Thus, we present the model results as population average effects. All models used robust standard errors to reflect the clustering of students within schools.

Approximately 12.2% of respondents with high mental health symptoms were missing on one of the stigma variables, covariates, or personal help-seeking outcomes; about 13.4% of the total Phase 2 sample had missing data. Most missing data comes from household income variable, which was collected at the pre-test assessment. We regressed the study variables on whether household income was missing or not and found evidence consistent with observations being missing at random given that very few participant characteristics were associated with missingness. As such, multiple imputation was chosen to address the missing data for household income. Other variables were not imputed because the extent of missing data was very minimal

(less than 3% per variable), which resulted in convergence issues with the imputation models. Longitudinal data from all assessments were used to impute missing values. Using STATA SE 17's multiple imputation chained procedures (StataCorp, 2021), 15 data sets were imputed and combined according to Rubin's rules (Rubin, 1987). Respondents missing on non-imputed variables were excluded (8.3% - 9.9% depending on outcome). Complete and imputed case analyses resulted in similar patterns of results. Only imputed analyses are presented.

Results

Help-Seeking for "Me" vs. Help-Seeking Recommendations for "Them"

Adolescents were less likely to engage in self-reported help-seeking than recommend the vignette characters seek help (Table 1). For adolescents with high-symptoms, 37%, 43%, and 16% used any formal, informal, and school-based services, respectively (not shown). Self-reported help-seeking was low, with adolescents reporting only slightly higher counts of engaging in informal than formal help. A little over 10% saw a school counselor, with those with high-symptoms indicating higher use in this setting. Over 90% believed Julia and David should seek help in all settings, and the average number of formal and informal providers endorsed was high. The number of recommendations for David were slightly lower compared to Julia.

Does Labeling Lead to Personal Help-Seeking and Peer Help-Seeking Recommendations?

Among the total sample, 44% self-labeled a mental health problem compared to 60% of adolescents with high symptoms; self-labeling is low (22%) among those with low symptoms (Table 1). Adolescents were, compared to their self-labeling, more likely to label Julia's (93%) and David's (72%) condition as a mental illness (Table 1).

[Insert Table 2 about here]

In multivariable analyses, self-labeling predicted self-reported help-seeking in two out of the three settings (Table 2). Adolescents with high symptoms that self-labeled versus not had higher counts of formal and informal help-seeking. Labeling the characters as having a mental health problem led to increased help-seeking recommendations in all settings for Julia (Table 3), but only one setting for David (formal help-seeking, Table 4), suggesting that labeling may be less motivating in referring youth with anxiety compared to bipolar symptoms to receive help.

Are Mental Illness Stereotypes Associated with Personal Help-Seeking Behaviors and Recommendations?

On average, adolescents reported moderate levels of mental health knowledge and positive attitudes, an indication that mental illness stereotypes were generally low among adolescents (Table 1). Alternatively, positive action/awareness was low: only the high-symptom subsample showed slightly more positive action/awareness than adolescents with low symptoms.

[Insert Table 3 about here]

Support for Hypothesis 2 was mixed. High general mental illness knowledge and positive attitudes (i.e., holding low stereotypes) did not increase help-seeking behaviors for adolescents with high symptoms, net of covariates (Table 2). However, positive action/awareness was significantly associated with increased counts of formal and informal help-seeking by 11% and 15%, respectively. Stereotypes operated differently for the vignette characters. Knowledge and positive attitudes were associated with greater counts of formal and informal recommendations and greater odds of school-based recommendations for Julia (Table 3). Positive action/awareness was not related to help-seeking recommendations. For David, knowledge/positive attitudes were associated with 12% higher counts of informal help-seeking referrals and nearly four times the odds of recommending school-based services (Table 4). Action/awareness was not significant.

Barrier vs. Facilitator: Does Separation and Discrimination Affect Personal Help-Seeking Behaviors and Recommendations Differently?

Separation/discrimination measured by social distance and avoidance of people with a mental illness were moderate to high. About two-thirds of all adolescents and three-quarters of the high symptom subsample purposely avoided people with a mental illness. Social distance towards Julia and David was moderate, but generally higher towards Julia than David.

[Insert Table 4 about here]

Adjusting for the model covariates, social distance and avoidance were not related to self-reported help-seeking behaviors, not supporting part of Hypothesis 3 (Table 2). Rather, there was partial support for Hypothesis 3 in the vignette characters. Greater social distance was associated with higher help-seeking recommendations for Julia in formal and school-based settings (Table 3). As a result, adolescents who desired greater social distance from Julia were more likely to suggest that she seek help. Avoidance of people with mental health problems during the previous six months was not associated with help-seeking referrals for Julia. Desired social distance from David was associated with higher counts of formal help-seeking recommendations only (Table 4). Any avoidance was associated with higher informal and school-based referrals for David, although these effects were not statistically significant.

Discussion

The current study expands our understanding of the intricate role of stigma in influencing mental health help-seeking among early adolescents. Adolescents are more inclined to make recommendations to formal, informal, and school-based services for hypothetical peers with diagnosable mental health problems than they are at seeking help for themselves in situations where they objectively report high symptoms. As such, the stigma domains of labeling,

stereotypes, and separation/discrimination do not always influence or interfere with help-seeking in the same way when the help-seeker is oneself versus a peer. Pro-treatment stigma domains (e.g., low negative stereotypes, labeling) were limited in their influence on personal help-seeking behaviors among youth but not in making help-seeking recommendations that involved peers. The use of longitudinal data allowed the exploration of time trend differences in the influence of stigma on help-seeking, with the longitudinal analyses revealing robust and consistent stigma effects. In other words, the relationship between stigma and help-seeking for oneself and others did not vary over time. Collectively, our findings suggest that the role of stigma on adolescent help-seeking is complicated not only across stigma domains, but also by type of help-seeking and by whether the person needing help is 'me' versus 'them'.

For mental illness labels, we hypothesized that labeling would lead to greater help-seeking overall, but that these labels would be more effective in encouraging referral of others rather than personal help-seeking. Results were mixed for Hypothesis 1: labeling predicted significantly increased engagement of personal help-seeking behaviors for two out of three outcomes, three out of three help-seeking recommendation outcomes for Julia (bipolar disorder), and only one out of three outcomes for David (social anxiety). In general, acknowledging the presence of a mental illness can facilitate understanding about the nature of the problem and how best to handle it. Although we expected that labeling would be less consistent in predicting help-seeking for oneself because it can function like a double-edged sword, self-labeling led to higher counts of adolescents engaging with formal and informal care providers. Self-labeling did not act like a double-edge sword for adolescents seeking help for a problem of their own, except perhaps for school-based services where there was no relationship between labeling and use of those

services. These services may require the support of a teacher and/or school administer for entry, or it may represent a response for deviance/disruptive behavior in the school setting.

With respect to the vignette characters, adolescents may more easily recognize that the character has a mental health problem, versus a problem of their own, because there is no receipt of self-stigma when labeling for others. As such, any negative consequences related to labeling would only apply to the peer/'them' rather than to the self/'me'. Additionally, adolescents who possess high levels of prosocial beliefs may be more motivated to help their peers when they recognize their peer's mental health struggles. Labeling, however, does not translate to more help-seeking referrals as adolescents struggle to make informal and school-based help-seeking referrals for peers with social anxiety compared to bipolar disorder. Labeling may lead to fewer help-seeking recommendations for anxiety disorders because they may be perceived to be less serious than other mental disorders. Additionally, the gender of the vignette characters may have biased how adolescents responded to help-seeking recommendations.

Overall, there was partial support for Hypothesis 2: low negative stereotypes led to higher help-seeking, but these patterns varied by the recipient of help-seeking. For adolescents, knowledge and positive attitudes was beneficial to making hypothetical peer help-seeking recommendations for both characters, but not for self-reported help-seeking. General knowledge about mental illness may not translate to personal help-seeking behaviors for adolescents with mental health problems because this knowledge is not action driven. For instance, understanding the symptoms that comprise depression is different from knowing when and how these symptoms should be treated and understanding how to navigate the stigma barriers associated with help-seeking. Instead, for adolescents with mental health problems, more specific competency about help-seeking, particularly stigma awareness/action, seems to facilitate their

help-seeking for mental health concerns of their own in both formal and informal settings. Stigma action/awareness may not be important for making help-seeking referrals as the person doing the navigation is not the individual making the referral, but rather the recipient of the referral. The action of making a help-seeking referral does not hinge on understanding the minutia of stigma and their barriers towards treatment but rather the general comprehension of mental illness and their treatment.

Finally, separation and discrimination was hypothesized to decrease personal help-seeking but increase peer recommendations to formal and school-based services. The findings somewhat support the latter part of Hypothesis 3 but not the former. A potential reason why separation/discrimination were not related to less self-reported help-seeking may pertain to the measures of discrimination used in the study. Our measures of social distance and avoidance only assessed their hypothetical and actual actions towards *others* with mental illness, not discrimination experienced as a result of their own mental health status. As such, these attitudes may not influence personal help-seeking because they are not directly relevant to the adolescent's own circumstance and may find it difficult to apply these consequences abstractly. Nevertheless, in sensitivity analyses, we tested whether bullying related to having a mental illness was associated with personal help-seeking, and the results were non-significant for all outcomes. Similar to other studies, social distance was found to be lower among adolescents with high mental health symptoms compared to those with low-to-moderate symptoms; yet, we also found that those with high symptoms reported higher avoidance of people with a mental illness. A potential reason for this pattern is that adolescents with high symptoms may be more self-aware of their own mental health status and therefore engage in behaviors that prevent adding additional stigma on the self, such as associating oneself with someone with a mental illness.

For the vignette characters, in contrast, social distance promoted recommendations to formal and school-based services (Julia only), which may suggest that adolescents are amenable to endorse these services in situations when the peer's symptoms are perceived as significant or problematic. For example, David's symptoms (e.g., avoiding social and stressful situations) may have been perceived as personality traits such as being introverted rather than having an underlying mental health condition. In fact, prior research suggests that adolescents have difficulty labeling social anxiety disorders than depression (Coles et al., 2016). Adolescents in this sample were less likely to label David's social anxiety as a mental illness (72%) and perceive it as serious (M=1.79, SD=0.66) compared to Julia (93%; M=2.05, SD=0.72). Separation/discrimination may be less applicable towards recommending informal help because these providers entail the involvement of individuals that may be stigmatized by associating themselves with the adolescent with a mental health problem.

These findings should be considered in light of certain limitations. First, help-seeking behaviors among adolescents with high symptoms were examined using self-reports and not confirmed with medical or school records. Second, while complex social networks, including parents and teachers, are active gatekeepers and participants to help-seeking for adolescents, our study primarily focuses on the adolescent's perspective on help-seeking. Nevertheless, the analyses did control for some parental factors (e.g., income and parent mental illness labeling). Third, while the study included measures of stigma that directly applied to the adolescent and their peers (i.e., labeling and social distance), the manner in which labeling was measured for one-self versus the vignettes was similar but not exactly the same; this measurement difference could possibly explain why the effect of labeling on help-seeking differed for personal behaviors compared to peer recommendations. Nevertheless, the study utilized strong measures of various

dimensions of mental illness stigma that have been validated in adolescent populations and are pertinent to help-seeking for the self and for peers. Finally, while the use of vignettes allowed us to systematically examine stigma responses to hypothetical peers, we were unable to examine how gender, race/ethnicity, or class variation of the vignette characters would influence findings; moreover, it is not clear if their proclivity to recommend help-seeking for hypothetical peers with a mental illness would translate to real peers. A recent systematic review suggests that depression may be more recognizable among female than male vignette characters (Singh et al., 2019). To address these potential biases, all analyses controlled for gender, race/ethnicity, and household income. Future research would benefit from randomizing the demographic characteristics of characters when utilizing vignettes in stigma research.

Despite these limitations, there were several strengths. First, the current study is novel as it contributes to the literature on stigma's role in shaping help-seeking: it matters whether the person needing help is 'me' or 'them.' This is a valuable distinction that has not been examined in prior research that has been limited by methodological approaches that assess personal help-seeking via intentions or attitudes but not actual behaviors. Second, we more thoroughly investigate how different dimensions of stigma independently influence personal help-seeking behaviors and peer recommendations among adolescents. Prior studies primarily examined public stigma–perceptions of the public's beliefs about people with a mental illness (Clark et al., 2020; Yap et al., 2011)—and self-stigma—internalized negative beliefs about their own mental health (Calear et al., 2021; Clark et al., 2020; Nearchou et al., 2018). Finally, the examination of stigma on self and peer help-seeking is robust because it utilizes two-year longitudinal data with validated stigma measures and includes a racially and socioeconomically diverse sample. Finally, although parents and teachers play significant roles in promoting or deterring adolescent

mental health help-seeking, the findings further demonstrate that adolescents are also key players and important advocates for promoting mental health help-seeking.

Mental illness stigma interventions that target adolescents such as in schools or online platforms may be effective in reducing stigma barriers and increasing personal use and recommendations of formal, informal, and school-based services. However, this distinction between "me" and "them" is pivotal to framing how stigma interferes or promotes help-seeking and referrals; anti-stigma interventions should consider the complexity of this "me vs. them" dichotomy in how stigma is discussed and challenged. Approaching stigma from this perspective could leverage existing prosocial orientations that some adolescents hold towards their peers in addition to promote prosocial behaviors, thereby encouraging adolescents to not only act for themselves but also on behalf of their peers. Ideally, these intervention efforts would take on a multipronged approach that focus on reducing stereotypes, preventing separation and discrimination, and increasing labeling, all while applying these concepts in the context of what it means to be a recipient and/or actor of stigma. Anti-stigma interventions are valuable for creating a social context that is understanding of mental health and its impact among peers; school settings can be ideal for these initiatives. It is also essential to incorporate actionable stigma training that instructs adolescents on how to navigate stigma barriers and engage in proactive behaviors that promote mental health and destigmatize mental illness. Decreasing discrimination and exclusion due to mental illness can further create an inclusive environment for adolescents with mental health problems. Coupled with improvements in recognizing mental health problems in each other, these anti-stigma efforts among adolescents can culminate to timely and improved help-seeking and result in better mental health long-term.

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Tables

Table 1. Sample characteristics, *Texas Stigma Study* (2011 – 2015)

	Total Phase 2 Sample (n=396)	**High Symptom Subsample (n=228)**	**Low to Moderate Symptom Subsample (n=168)**
	% or M (SD)	**% or M (SD)**	**% or M (SD)**
Demographic Characteristics			
Male	44.19%	42.98%	45.83%
Racial/ethnic minority	75.25%	73.68%	77.38%
Household income of $40K or more	41.92%	42.98%	40.48%
Mental Illness Stigma			
Self-Labeled Mental Health Problem	43.91%	59.91%	22.16%
Knowledge/Positive Attitudes (1=Low to 5=High)	3.59 (0.32)	3.62 (0.33)	3.57 (0.30)
Action and Awareness (1=Low to 9=High)	1.57 (1.29)	1.74 (1.36)	1.32 (1.14)
Social Distance (1=Low to 4=High)	1.94 (0.63)	1.90 (0.64)	2.00 (0.61)
Any Avoidance	66.41%	71.05%	60.12%
Vignette-Based Mental Illness Stigma			
Perceived Mental Health Problem in Julia	92.93%	---	---
Perceived Mental Health Problem in David	71.90%	---	---
Social Distance towards Julia (1=Low to 4=High)	2.05 (0.72)	---	---
Social Distance towards David (1=Low to 4=High)	1.79 (0.66)	---	---
Self-Reported Help-Seeking Behaviors			
Count of Formal Help	0.29 (0.61)	0.36 (0.66)	0.20 (0.55)
Count of Informal Help	0.30 (0.56)	0.37 (0.57)	0.19 (0.53)
School Counselor	13.67%	15.35%	11.38%
Julia Help-Seeking Referrals			
Count of Formal Help	2.41 (0.73)	---	---
Count of Informal Help	1.52 (0.48)	---	---
School Counselor	93.42%	---	---
David Help-Seeking Referrals			
Count of Formal Help	1.92 (0.93)	---	---
Count of Informal Help	1.47 (0.48)	---	---
School Counselor	94.68%	---	---

Table 2. Generalized estimating equation regression models examining mental illness stigma on self-reported help-seeking behaviors among adolescents with high mental health symptoms at any point during the study: *Texas Stigma Study*, Phase 2 High-Symptom Subsample

	Formal Help-Seeking[a] (n=228)		**Informal Help-Seeking[a] (n=228)**		**School Based Help-Seeking[b] (n=224)**	
	IRR	**[95% CI]**	**IRR**	**[95% CI]**	**OR**	**[95% conf.**
Mental Illness Stigma						
Self-Labeled Mental Health Problem	1.62*	[1.10, 2.37]	1.67**	[1.21, 2.31]	1.24	[0.56, 2.78]
Knowledge/Positive Attitudes	0.93	[0.44, 1.95]	0.60	[0.30, 1.20]	0.42	[0.12, 1.53]
Positive Action/Awareness	1.11*	[1.01, 1.23]	1.15**	[1.05, 1.26]	1.13	[0.91, 1.40]
Social Distance	1.17	[0.85, 1.61]	0.93	[0.64, 1.37]	0.75	[0.40, 1.40]
Any Avoidance	0.95	[0.68, 1.35]	0.93	[0.70, 1.24]	1.78	[0.84, 3.75]

[a] GEE Poisson regression model

[b] GEE Binomial logistic regression model

NOTE: Analyses control for mental illness familiarity, male gender, race/ethnicity, intervention assignment, household income, study assessment period, parent labeled mental health problem, and pre-test help-seeking behaviors; *$p < .05$, **$p < .01$

Table 3. Generalized estimating equation regression models examining mental illness stigma on mental health help-seeking referrals for Julia (bipolar depression vignette): *Texas Stigma Study*, Total Phase 2 Sample

	Formal Help-Seeking[a] (n=396)		**Informal Help-Seeking[a] (n=396)**		**School-Based Help-Seeking[b] (n=392)**	
	IRR	**[95% CI]**	**IRR**	**[95% CI]**	**OR**	**[95% CI]**
Mental Illness Stigma						
Labeled Mental Health Problem	1.21***	[1.13, 1.30]	1.14***	[1.06, 1.22]	1.65*	[1.12, 2.44]
Knowledge/Positive Attitudes	1.16***	[1.07, 1.25]	1.08*	[1.00, 1.16]	2.11*	[1.17, 3.83]
Positive Action/Awareness	1.00	[0.99, 1.01]	1.01	[0.99, 1.02]	1.10	[0.99, 1.23]
Social Distance	1.04*	[1.00, 1.08]	0.99	[0.96, 1.03]	1.36*	[1.05, 1.76]
Any Avoidance	1.00	[0.96, 1.04]	1.03	[0.99, 1.08]	0.89	[0.64, 1.24]

[a] GEE Poisson regression model

[b] GEE Binomial logistic regression model

NOTE: Analyses control for perceived seriousness of Julia's condition, mental illness familiarity, male gender, race/ethnicity, intervention assignment, household income, study assessment period, parent labeled mental health problem, and pre-test help-seeking behaviors; *$p < .05$, ***$p < .001$

Table 4. Generalized estimating equation regression models examining mental illness stigma on mental health help-seeking referrals for David (social anxiety disorder vignette): *Texas Stigma Study*, Total Phase 2 Sample

	Formal Help-Seeking[a] (n=394)		**Informal Help-Seeking[a] (n=394)**		**School-Based Help-Seeking[b] (n=392)**	
	IRR	**[95% CI]**	**IRR**	**[95% CI]**	**OR**	**[95% CI]**
Mental Illness Stigma						
Labeled Mental Health Problem	1.28***	[1.19, 1.39]	1.05	[0.99, 1.10]	1.00	[0.69, 1.46]
Knowledge/Positive Attitudes	1.12	[0.99, 1.25]	1.12**	[1.03, 1.21]	3.67***	[1.86, 7.22]
Positive Action/Awareness	1.01	[0.99, 1.03]	1.01	[0.99, 1.02]	1.09	[0.95, 1.24]
Social Distance	1.07*	[1.00, 1.13]	0.99	[0.94, 1.03]	0.97	[0.74, 1.27]
Any Avoidance	0.99	[0.93, 1.06]	1.03	[0.98, 1.08]	1.30	[0.89, 1.89]

[a] GEE Poisson regression model

[b] GEE Binomial logistic regression model

NOTE: Analyses control for perceived seriousness of David's condition, mental illness familiarity, male gender, race/ethnicity, intervention assignment, household income, study assessment period, parent labeled mental health problem, and pre-test help-seeking behaviors; $^{**}p < .01$, $^{***}p < .001$

Appendix

Appendix A. Description of school-based anti-stigma interventions evaluated in the *Texas Stigma Study*.

Intervention	Description
Eliminating the Stigma of Differences Curriculum Intervention	This teacher-led curriculum is a three-module program that was delivered to adolescents over one week. The modules addressed the following: definition of stigma, how it manifests, its consequences, and possible solutions (Module 1); definition, causes, and treatment of mental illnesses (Module 2); and, description of specific mental disorders, including attention-deficit hyperactivity disorder, depression, anxiety, schizophrenia, and bipolar disorder (Modules 2 and 3). The content presented was designed to stimulate empathy. The curriculum included a didactic component, group discussions, and homework assignments.
Contact Intervention	Two young adults, one male and one female, with histories of hospitalization for bipolar disorder were invited to talk about their experiences living with a mental illness to the class. These presentations were designed to moderately disconfirm stereotypes of mental illness. Presentations were approximately ten minutes and followed by a question and answer discussion session up to one hour of class time. The full presentation was moderated by teachers.
Printed Materials Intervention	Posters with anti-stigma messaging were displayed in classrooms over a two-week period. Students were also provided with bookmarks that used destigmatizing language to describe people with mental illnesses. Instead of using mental illness labels to describe these individuals, the focus was to describe their personality traits and abilities.
No Intervention Control	Participants were not exposed to any intervention. This group received standard/usual instruction (i.e., any mental health education that was previously disseminated in schools prior to the intervention study).