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Child Problem Recognition and Help-Seeking Intentions Among Black and White Parents

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Abstract

Objective—Parents play a central role in utilization of mental health services by their children.

This study explored the relationship between parents' recognition of child mental health problems and their decisions to seek help.

Method—Participants included 251 parents (49% Black, 51% White; 49% fathers, 51% mothers) recruited from community settings. Parents ranged in age from 20–66 years-old with at least one child between ages 2–21. Parents read three vignettes that described a child with an anxiety disorder, ADHD, and no clinically-significant diagnosis. Parents completed measures of problem recognition, perception of need, willingness to seek help, and beliefs about causes of mental illness.

Results—Findings from Generalized Estimating Equations revealed that parents were more likely to report intentions to seek help when they recognized a problem ($OR = 41.35, p < .001$, 95% CI [14.81, 115.49]), when it was an externalizing problem ($OR = 1.85, p < .05$, 95% CI [1.14, 3.02]), and when parents were older ($OR = 1.04, p < .05$, 95% CI [1.01, 1.08]). Predictors of parental problem recognition included perceived need, prior experience with mental illness, and belief in trauma as a cause of mental illness. Predictors of help-seeking intentions included problem recognition, perceived need, externalizing problem type, and being female.

Conclusions—Given the relationship between parental problem recognition and willingness to seek help, findings suggest that efforts to address disparities in mental health utilization could

focus on problem-specific, gender-sensitive, mutable factors such as helping parents value help-seeking for internalizing as well as externalizing problems.

Keywords

Mental Health Utilization; Disparities; Externalizing; Internalizing; Gender Differences

In the wake of the seminal U.S. Surgeon General's Report (U.S. Department of Health Human Services, 1999) and more recent National Survey on Drug Use and Health report (Substance Abuse and Mental Health Services Administration, 2012) highlighting significant discrepancies in youth mental health utilization, there remains a dearth of studies on improving service underutilization in children. Racial and ethnic differences in youth service utilization have been consistently shown with recent work indicating differences by mental health sector (Barksdale, Azur, & Leaf, 2010). The role of parents in youth service utilization has also been discussed (Gopalan et al., 2010). Some studies have examined the influence of parents' values, beliefs, and attitudes on youth service utilization. For example, Yeh and colleagues (2005) showed that parental beliefs influenced service utilization. They showed that parents who believed that mental health problems were due to "biopsychosocial" beliefs (i.e., beliefs that mental illness is caused by physical, personality, relational, familial, or traumatic issues) were more likely to have utilized mental health services two years later. However, parents who believed that mental health problems were due to "sociological" beliefs (i.e., beliefs that mental illness is caused by peer relationships, American culture, discrimination/prejudice, or economic problems) were less likely to have utilized services (Yeh et al., 2005). Other work has shown that parents are more willing to overcome certain barriers and attitudes against service utilization when seeking services for their children versus themselves (Thurston & Phares, 2008).

Across the literature, help-seeking (i.e. the process of looking for services) has been consistently shown to be associated with service utilization (i.e. actual use of services). A review and integration of several help-seeking models illustrated a parent-mediated pathway from help-seeking to service utilization for adolescents (Logan & King, 2001). Further, the Youth Help-Seeking and Service Utilization Model (Cauce et al., 2002), which guided the present study, delineates three major stages in the help-seeking pathway for youth: problem recognition, decision to seek help, and support network and service utilization patterns. According to the model, movement along the stages is determined by illness profile (e.g., perception of need, education, and psychopathology), predisposing characteristics (e.g., age, gender, race/ethnicity, and beliefs about the causes of mental illness), and barriers and facilitators to care (e.g., access to care, availability of services, income, community and social network influences). The study of the entire Youth Help-Seeking and Service Utilization Model is beyond the scope of this study. Therefore, the first and arguably, most important, step of the help-seeking process was investigated (i.e., problem recognition). In addition, factors that tied this first step (problem recognition) to the next step (decision to seek help) were also examined.

Problem Recognition

The typical first step before help-seeking occurs is problem recognition (Cauce et al., 2002), yet fewer than half of the parents who have a child with a mental health disorder recognize problems in their child (Sayal, 2006). In their review, Zwaanswijk and colleagues found that child psychopathology was insufficient to predict problem recognition; however, help-seeking was enhanced with increased severity, comorbidity, and persistence of problems (Zwaanswijk, Van der Ende, Verhaak, Bensing, & Verhulst, 2005). The influence of problem type (i.e., internalizing versus externalizing) on problem recognition remains unclear; however, problem recognition may be influenced by clinical assessment of need, perceived need, and family characteristics (Cauce et al., 2002). Clinical assessment of need involves objective assessment by a professional while perceived need describes subjective perception of distress by the child's caregiver. Subjective perception of need has been identified as a stronger predictor of problem recognition than objective need due to the family's own understanding of problematic behaviors and how the family's perception influences help-seeking (Srebnik, Cauce, & Baydar, 1996). Parents' conceptualization of their child's problematic behaviors has been shown to influence their perception of the need for treatment (dosReis, Mychailyszyn, Myers, & Riley, 2007). Further, family characteristics, higher education level and greater family stress influenced help-seeking, and parental psychopathology increased problem recognition but not utilization (Zwaanswijk, Verhaak, Bensing, van der Ende, & Verhulst, 2003). Of note, previous studies have typically examined service utilization differences for specific illnesses, i.e., ADHD (Brinkman & Epstein, 2011; dosReis, Mychailyszyn, Myers, & Riley, 2007), and anxiety (Chavira, Stein, Bailey, & Stein, 2003); however, few studies have compared both internalizing and externalizing problems at the same time. Among studies that have compared both types of problems, threshold differences in help-seeking have been noted. Specifically, one study showed differences in the threshold of mental health problems by race and ethnicity (Weisz, Eastman, Verhulst, & Koot, 1995). Thus while the literature is inconsistent with respect to how internalizing and externalizing problems influences service utilization, we would expect that problem type would influence problem recognition and willingness to seek help.

Help-seeking

The second step in the process toward service utilization, help-seeking, is influenced by problem recognition, predisposing characteristics, and barriers/facilitators to care (Cauce et al., 2002). Predisposing characteristics (i.e., demographics such as age, gender, race and ethnicity, and sociocultural values and beliefs such as attitudes, knowledge, and acculturation) have been shown to influence help-seeking intentions. Specifically, empirical research has shown that African Americans are less likely to seek help from mental health professionals and agencies compared to Caucasians (Barksdale et al., 2010; Bussing, Gary, Mills, & Garvan, 2003; Dobalian & Rivers, 2008; Snowden, 2001). A significant contributor to lower service utilization among African Americans is related to reduced access to care in predominantly Black neighborhoods (Substance Abuse and Mental Health Services Administration, 2012). Additionally, girls are less likely to receive treatment overall and specifically less likely to receive services for externalizing problems than boys (Zimmerman, 2005). This pattern is contrary to adult women who seek and utilize service

more than men (Mahalik, Good, & Englar-Carlson, 2003). Gender differences in youth may be related to child age, given that help is more often sought for boys during childhood and early adolescence whereas more help is sought for girls during late adolescence (Zwaanswijk et al., 2003). With respect to help-seeking and sociocultural values and beliefs, female youth report more positive help-seeking attitudes, perceive fewer barriers, and report less stigma to utilizing mental health services than do male youth (Chandra & Minkovitz, 2006; Raviv, Raviv, Vago-Gefen, & Fink, 2009). Furthermore, parents who had more positive attitudes toward mental health services were more willing to seek help for their children (Stiffman, Pescosolido, & Cabassa, 2004; Thurston & Phares, 2008). Parental knowledge of specific mental health problems has also been shown to contribute to parents' decision to seek help for their children (Bussing et al., 2012; Power, Eiraldi, Clarke, Mazzuca, & Krain, 2005). The relationship between help-seeking and barriers/facilitators to care (i.e., community/social networks, income, health insurance, access, and health care policies) have been shown across several studies. Specifically, youth's networks (parents, teachers, primary care providers), parental socioeconomic status (SES), and access to and availability of services have been shown to be related to help-seeking (Lindsey, Barksdale, Lambert, & Ialongo, 2010; Power et al., 2005; Shanley, Reid, & Evans, 2008; Zwaanswijk et al., 2005).

Racial and Ethnic Disparities

Previous research indicates decreased help-seeking patterns and mental health service utilization by individuals who are Black, male, and/or poor (President's New Freedom Commission on Mental Health, 2003). Although previous research has sought to address the racial/ethnic disparities of service utilization (Bussing et al., 2003; Bussing, Koro-Ljungberg, Gary, Mason, & Garvan, 2005; dosReis et al., 2006; dosReis et al., 2007; Goldstein, Olfson, Wickramaratne, & Wolk, 2006; Merikangas et al., 2011; Olaniyan et al., 2007), disparities persist, with African Americans being less likely to visit a mental health professional even after controlling for SES and insurance coverage (Dobalian & Rivers, 2008). Utilization and help-seeking disparities among Blacks have been attributed to mistrust and fear of treatment, racism/discrimination, differences in language and communication, and cultural barriers (Thompson, Bazile, & Akbar, 2004). The relationship between parental race and gender and youth help-seeking has not been investigated thoroughly.

Current Study

The current study used vignettes, an empirically supported method (Bussing et al., 2012; Martin, Pescosolido, Olafsdottir, & McLeod, 2007; Raviv et al., 2009), to explore the relationship between parents' endorsement of youth mental health problems (i.e., internalizing, externalizing) in a vignette and parents' decisions to seek help. Based on the Youth Help-Seeking and Service Utilization Model (Cauce et al., 2002), it was hypothesized that (1) parents would be more likely to seek help when they endorsed problematic behavior; (2) parents who perceived greater need, had prior exposure to the mental disorder being examined, endorsed biopsychosocial beliefs, or self-identified as White or female would be more likely to endorse problematic internalizing and externalizing behaviors; and (3) among

parents who endorsed a problematic behavior, those who perceived greater need, had prior exposure to the disorder being examined, endorsed biopsychosocial beliefs, or self-identified as White or female would be more willing to seek help.

Method

Participants

Two hundred and fifty-one mothers and fathers participated in the current study. Targeted sampling was used to recruit approximately equal numbers of Black and White mothers and fathers (49% Black, 51% White, 49% fathers, 51% mothers) from an urban Southeastern area. Parents ranged in age from 20 to 66 years old ($M = 40.0$, $SD = 8.15$). The majority of parents were married (73%), 14% were divorced/separated, 11% were single, and 1% was widowed. Nine percent of parents reported receiving public assistance; the social strata for the average participating parent, based on Hollingshead criteria (Hollingshead, 1975), represented medium businesses, minor professionals, and technical jobs ($M = 47.8$; $SD = 10.2$). Participants' occupations ranged from doctors and lawyers to janitorial staff, and the average household income fell within the \$50,001–\$65,000/year range. Additional demographic information stratified by race and gender is provided in Table 1. Given significant differences among groups, age and SES were statistically controlled in the final analyses.

Procedure

This study was conducted in compliance with the university's Institutional Review Board and informed consent was obtained. Parents were eligible if they had at least one child between the ages of 2 and 21 and had at least monthly face-to-face contact with their child. A total of 66% of participants were recruited via direct invitation (i.e., snow-ball method [parents who participated invited other parents to participate] or individually approached at parent-focused community events) and 22% were recruited through community organizations (i.e., Boys and Girls club and after-school programs). An additional 6% were recruited through online listservs, 3% through their participation in other studies, and 3% through flyers. Participants who expressed interest in the study were mailed or handed-out survey packets. Identifying information was not collected and data collection took place largely through the mail and drop-off boxes at community sites. A total of 806 surveys were distributed and 289 were returned resulting in a 36% participation rate, which is consistent with other community research (Kropf & Blair, 2005; Shumway, Unick, McConnell, Catalano, & Forster, 2004). Final analyses included 251 surveys from parents who identified as Black or White.

Measures

Demographics—Parents reported on their gender, age, marital status, annual income, zip code, insurance, public services received, education (for self and spouse/partner), occupation (for self and spouse/partner); age, gender, and race/ethnicity of their children; and household composition. Mothers and fathers who participated in this study were not necessarily dyads, although some parents may have been from the same households. Surveys were completed anonymously to encourage participants to be forthcoming in their responses; however, this

means that we could not determine how many of the parents in our study were married to each other. SES was derived based on household gender, marital status, education, and occupation using the Hollingshead four factor index of social status (Hollingshead, 1975).

Beliefs about causes of mental health problems— revised—Parents completed the psychometrically sound Beliefs About Causes – Revised scale (Yeh et al., 2005) , which is comprised of 11 scales and three broad categories: Biopsychosocial (5 scales: Physical Causes, Personality or Emotional Struggles, Getting Along with Others, Trauma, Family or Parenting Issues), Sociological (4 scales: Friends, American Culture, Discrimination or Prejudice, and Economic Problems), and Spiritual/Nature Disharmony (2 scales: Spiritual or Religious Reasons, and Imbalance or Disharmony with Nature). Endorsement of an individual item on one of the 11 scales indicates scale endorsement and belief in that specific cause of mental health problems. Internal consistency was excellent for the overall scale ($\alpha = .91$). The most frequently endorsed beliefs were physical causes (36%), trauma (23%), family or parenting issues (19%), and personality or emotional struggles (17%).

Experience with mental illness—Participants were asked: “Please circle YES or NO, to indicate if you have had any personal or professional experience with any of the following disorders that are sometimes found in children and adults.” This question was followed with a list of disorders including: Attention Deficit Hyperactivity Disorder (ADHD) and anxiety.

Vignette construction—Vignettes were created based on criteria from the *DSM-IV* (American Psychiatric Association, 2000) and used to give parents some distance from their own children’s mental health histories. Three vignettes were used to describe one internalizing problem (anxiety), one externalizing problem (ADHD), and one control case without a clinically significant diagnosis (see Appendix A). Characteristics described in the internalizing/anxious vignette included being overly worried and nervous at home and school, concerned about getting perfect grades and keeping things neat, concentration and sleep difficulties due to worrying. Characteristics of the externalizing/ADHD vignette included increased distractibility and forgetfulness at home and school, inability to finish tasks, numerous careless mistakes, difficulty with sustained attention, frequent interruption, being impatient, and fidgety. Characteristics of the control vignette included having good grades, good social relationships, occasional minor arguments with friends, expression of remorse after engaging in inappropriate behaviors, and engagement in extracurricular activities. Vignette characteristics were chosen, and modified after review by two independent clinicians (licensed child clinical psychologists who were involved in the University’s Psychology Training Clinic), to represent a range of common and easily identifiable symptoms of generalized anxiety and ADHD.

A panel of clinicians who work with youth and families reviewed and rated vignettes for authenticity and to ensure that the anxiety and ADHD vignettes met criteria for clinically assessed need. The panel included 7 licensed clinical psychologists who worked in academic or private practice settings and 9 psychology doctoral trainees who had completed a minimum of two years in their psychology program and had a minimum of one year of clinical experience working with youth and families. All clinicians involved in this study were selected randomly from the Psychology Training Clinic and had complete

independence from the study. Suggesting the validity of our vignettes, paired sample *t*-tests of the panel's severity ratings (range from 0–4, with 4 being most severe) indicated that the anxiety ($M = 3.25$, $SD = 0.45$) and ADHD ($M = 3.12$, $SD = 0.34$) vignettes did not differ significantly in perceived severity $t(15) = 1.00$, $p = .33$., and the control ($M = 1.31$, $SD = 0.48$) vignette was significantly different from the anxiety and ADHD vignettes. Additionally, all clinicians reported that they would recommend treatment for the internalizing and externalizing vignettes (but not for the control), indicating that problems described in the clinical vignettes were severe enough to warrant treatment as endorsed by the panel of clinicians.

All three vignettes described a 10-year-old child (chosen to coincide with a typical 5th grader and school-age developmental phase where social awareness and academic success are being mastered) and were identical for all study participants, with the exception of the child's gender, which was randomized among parents. Thus, approximately equal numbers of Black and White mothers and fathers completed the three vignettes with either all-boy or all-girl descriptions. The names of children used in the vignettes were selected from the most popular names for boys (Michael, Chris, Joshua) and girls (Ashley, Brittany, and Jessica) in the Southeast from 1990–1999 (Popular baby names, 2007).

Participants were asked a series of questions after reading each vignette (see Appendix A). Participants were first asked about their perception of need across four areas on 5-point Likert scales from 1 (*not at all*) to 5 (*extremely*). “How serious would you rate Michael's (or equivalent name for girl vignettes) problems compared to other 10-year-olds?” “How concerned would you be about Michael's problems?” “How much do you think these problems would affect Michael's daily activities?” and “How much do you think these problems would impact Michael's family?” Given the high correlations among the perceived need variables for the internalizing (.66 - .80) and externalizing (.70 - .83) vignettes, these variables were combined into a Perceived Need Mean Scale Score (internalizing perceived need $\alpha = .91$, externalizing perceived need, $\alpha = .93$). Parents were then asked “Do you think Michael has a mental health problem?” (yes/no). An additional follow-up question asked parents about their willingness to seek help for each vignette: “If you were responsible for Michael, would you seek help for him? (yes/no). The order of the vignettes versus other survey measures was randomized.

Manipulation check—In the overall parent sample, 52% of parents correctly recognized the internalizing vignette as problematic, 61% correctly recognized the externalizing vignette as problematic, and 89% correctly recognized the control vignette as not problematic. This is in contrast to 100% of the panel of clinicians who rated the internalizing and externalizing vignettes as problematic. Given that the same set of parents rated all three vignettes, repeated measures logistic regression was used to further examine parents' ratings of the internalizing, externalizing, and control vignettes. Supporting the validity of the vignette manipulation, results indicated that parents were more likely to recognize the internalizing ($OR = 9.62$, 95% CI [6.04, 15.33], $p < .001$) and externalizing ($OR = 14.29$, CI [9.03, 22.60], $p < .001$) vignettes as problematic compared to the control vignette. Notably, parents recognized the externalizing vignette as problematic more often than the internalizing vignette ($OR = 1.49$, CI [1.04, 2.13], $p < .05$). Exploration of vignette ratings

based on child gender (which was randomized among parents) revealed no differences in problem recognition ($OR = 1.29$, $p = .19$). Thus, parents were similarly likely to identify externalizing and internalizing problems when the vignettes described a male or a female child.

Analytic Strategy

Using SPSS Version 21, all models were fit using generalized estimating equations (GEE) to account for repeated-measures with either unstructured (hypothesis 1) or independent (hypothesis 2 and 3) working covariance matrices based on the best model fit (Hanley, Negassa, & Forrester, 2003). We report exponentiated log-odds and confidence intervals for all the outcomes. The first model, which was adjusted for covariates of age, race, and SES, examined the effects of vignette type (i.e., internalizing and externalizing) and parental problem recognition on willingness to seek help.

The second model explored predictors of problem recognition including vignette type, perception of need, prior exposure to the mental disorder being examined (i.e., anxiety or ADHD), endorsement of biopsychosocial beliefs, and self-identity as White or female. Controlling for SES and age, GEE models were used to determine which of the predictor variables were related to problem recognition.

Similarly, the third hypothesis used GEE models to examine the predictors of help-seeking intentions while controlling for SES and age. Predictors examined included problem recognition, vignette type, perception of need, prior exposure to the mental disorder being examined, endorsement of biopsychosocial beliefs, and self-identity as White or female.

Results

Problem Recognition and Help-Seeking Intentions

The first hypothesis predicted that parents would be more likely to seek help when they recognized a problem in the vignette. In the adjusted GEE accounting for covariates of age, race, and SES, parents were more likely to report willingness to seek help when they recognized a mental health problem ($OR = 41.35$, $p < .001$, 95% CI [14.81, 115.49]), when the problem was externalizing in nature ($OR = 1.85$, $p < .05$, 95% CI [1.14, 3.02]), and when parents were older ($OR = 1.04$, $p < .05$, 95% CI [1.01, 1.08]) (see Table 2).

Predictors of Problem Recognition

We hypothesized that parental perceived need, prior exposure to the mental disorder being examined, endorsement of biopsychosocial beliefs, and self-identifying as White or female would predict parental endorsement of problematic behavior from a vignette. GEE modeling revealed that for every unit increase on the perceived need scale, parents were 4.63 times (95% CI [3.30, 6.49]) more likely to recognize a problem. In addition, parents who had prior exposure to ADHD or anxiety were 2.17 times (95% CI [1.31, 3.59]) more likely to recognize a problem. Conversely, parents who endorsed that mental health problems were caused by trauma ($OR = 0.12$, 95% CI [0.03, 0.44]) were less likely to endorse problematic

behaviors from the vignette. None of the other beliefs about causes of mental illness were significant (see Table 3).

Predictors of Willingness to Seek Help

Parental problem recognition, perceived need, vignette type, prior exposure to the mental disorder being examined, beliefs, and socio-demographic factors were examined in GEE models as possible predictors of help-seeking intentions. Results showed that parents who recognized a mental health problem were 21.59 times more likely to seek help (95% CI [7.53, 61.91]) compared to parents who did not recognize a problem. Further parents were more likely to endorse willingness to seek help for an externalizing problem ($OR = 2.04$, 95% CI [1.15, 3.62]), when they were female ($OR = 2.45$, 95% CI [1.20, 5.03]), and when they perceived need for intervention ($OR = 3.62$, 95% CI [2.06, 6.36]) (see Table 4).

Discussion

This study aimed to test specific, mutable factors that influence Black and White parents when seeking services for their children. Findings suggested that parents were more willing to seek help when they recognized a mental health problem in the vignettes. The relationship between parental problem recognition and help-seeking intentions is striking given that almost half of the parents in this study did not recognize the internalizing problem vignette and over a third did not correctly identify the externalizing vignette, despite clinician endorsement that treatment was needed for each of these vignettes. This finding is consistent with previous research documenting that almost half of the parents who have a child with a mental health problem do not recognize these symptoms in their child (Sayal, 2006). Our finding is especially salient given that we utilized a quasi-experimental method and were able to approximate real world results. Our finding that parents were better able to recognize and more willing to seek help for an externalizing problem over an internalizing problem is also notable. Previous work has examined utilization of services for specific illnesses such as ADHD (Brinkman & Epstein, 2011; dosReis et al., 2007) and anxiety (Chavira et al., 2003) but few studies have compared recognition of both internalizing and externalizing problems at the same time. A previous review reported inconsistencies in parental recognition of internalizing over externalizing problems or vice versa (Zwaanswijk et al., 2003). One theoretical explanation attributes service underutilization rates to differing problem thresholds, which vary across cultures and racial groups (Weisz et al., 1995). Specifically, due to the more covert nature of internalizing problems, it is possible that parents in this study were less likely to recognize the internalizing vignette because of differing thresholds for recognizing mental health problems. Our study design did allow for decreased ambiguity in symptomatology, given that the vignettes were clearly described and standardized which rarely exists in the real world. However, even with clear descriptions of symptoms (which by clinicians' standards met criteria for intervention) and vignettes that were not about their own child (which might allow for some emotional separation), many parents still did not recognize these mental health symptoms, suggesting a specific area to focus intervention efforts.

Our finding that perception of need was related to both problem recognition and help-seeking intentions is consistent with previous studies (Power et al., 2005; Teagle, 2002). Interestingly, experience/exposure to mental illness influenced problem recognition but not help-seeking. Future studies could explore whether there is a certain threshold of experience required to improve problem recognition and willingness to seek help and could consider using training videos/vignettes to artificially expose parents to mental illness and normalize the experience of help-seeking in efforts to promote service utilization.

The finding that problem recognition and perception of need were the most prominent factors impacting help-seeking intentions is promising given the mutability of these factors. However, other non-mutable factors that also predicted problem recognition (belief in trauma as a cause of mental illness) and help-seeking (being female) need to be addressed in future work. Specifically, exploring the unique beliefs parents have about trauma that leads to increased problem recognition is important. Additionally developing customized strategies for increasing help-seeking among fathers, such as direct marketing of therapy to men, increased flexibility in clinic hours/days to accommodate working fathers, and involving fathers from the beginning and throughout the therapeutic process (Phares, Rojas, Thurston, & Hankinson, 2010).

We were interested in exploring whether race differences in problem recognition might explain some of the reasons why mental health services are used less frequently by Blacks. This hypothesis is consistent with previous work which has documented differing thresholds for problematic behaviors by various ethnicities and races (Weisz et al., 1995). Although race differences in help-seeking have been well established (Roberts, Alegria, Roberts, & Chen, 2005; Snowden & Yamada, 2005), this study did not find significant race differences in problem recognition or help-seeking intentions when vignettes were used. This finding may be due to the strong influence of problem recognition and perception of need above all else when parents are making decisions about help-seeking for children. This is consistent with previous research showing that parents are better able to overcome certain barriers to seek help for their children than for themselves (Thurston & Phares, 2008). Furthermore, this lack of racial differences in problem-recognition and willingness to seek help implicates the primary role that structural and access barriers may have in the disparity in service underutilization among Black Parents.

Our study revealed gender differences in help-seeking intentions but not problem-recognition. This is consistent with previous studies that have established differing utilization rates for males and females (Koopmans & Lamers, 2007; Mahalik et al., 2003). It is interesting that mothers and fathers endorsed problematic behaviors from the vignettes similarly but mothers were more willing to seek help for children. Findings also revealed that parental beliefs about causes of mental health problems matter with respect to problem recognition but not for help-seeking. Consistent with our hypothesis and previous work (Yeh et al., 2005), one of the biopsychosocial beliefs (Trauma) was associated with problem recognition but in an unexpected direction, such that parents who believed trauma was a cause of mental illness were less likely to endorse problematic behaviors from the vignettes. Importantly, beliefs did not play as major of a role as expected in problem recognition or

help-seeking intentions. Further exploration and replication of this finding will be important to determine its implications.

Implications for Research, Policy, and Practice

Our findings underscore the importance of increasing parental knowledge of both internalizing and externalizing symptoms and of empowering parents to become keen assessors of children's functioning. There is a need for interventions aimed at increasing parents' abilities to recognize problems and seek help from appropriate sources. The finding that problem recognition was strongly associated with willingness to seek help further highlights the benefit of increasing problem recognition skills in parents. Specifically, given that problem recognition is the first step along the help-seeking pathway (Cauce et al., 2002) and parents are the gateway to youth mental health service utilization (Stiffman et al., 2004), it is imperative to develop targeted strategies to improve parental problem recognition. Interventions could provide psychoeducation on how, when, and what internalizing and externalizing symptoms should be of concern. Prevention education could also teach parents how internalizing symptoms might not be immediately apparent, but that symptoms can spiral downward with worsened impact on child functioning, if appropriate help is not sought early. Additional strategies to help parents initiate and maintain service utilization have included: providing therapeutic services at primary care provider offices (Brown, Wissow, Zachary, & Cook, 2007), offering high quality clinical services at schools (Owens & Murphy, 2004), and utilizing clergy to refer and/or initiate therapeutic services (Milstein, Manierre, Susman, & Bruce, 2008). Further research is needed to determine effectiveness of these strategies at all stages of help-seeking. For non-mutable factors that influence problem recognition and help seeking, such as gender and beliefs, researchers and interventionist can reach out to individuals in these categories to further explore their unique barriers to service utilization.

Study Limitations

This study successfully assessed parent problem recognition using vignettes; however, we only assessed help-seeking intentions not actual behavior. Although these are strongly related (Ajzen, 1991), intentions do not always correspond with behavior. Future research may consider more ecologically valid strategies to assess parental problem recognition and help-seeking intentions. For example, researchers could use videos of actual child behavior which may increase the saliency of symptoms. Alternatively, parents (who are naïve to service utilization for their children) could be administered prescreen measures assessing their own child's internalizing and externalizing symptoms. Then, parents can be administered vignettes which would assess their ability to endorse problematic behaviors for a vignette and willingness to seek help. Their vignette responses can then be compared to their reports of their own child's symptoms for a more ecologically valid assessment of problem recognition and help-seeking intentions. While we were able to recruit a large number of Black parents, especially fathers, the generalizability of this study may be limited given that participants were not sampled nationally and were primarily of higher SES, suggesting a possible selection bias. Further, our statistical estimates may not be precise due to the small overall sample size and potential of nested data stemming from any parents who lived in the same household. Given that some mothers and fathers were not independent, our

data likely represents less than 251 distinct families. The anonymity of our surveys prevented us from adjusting our models to account for highly correlated data within households. Future research on how to correct for nested data in anonymous samples is needed. The design of the vignettes did allow for examination of clinically assessed versus parental perceived need in a 10-year-old child; however, we were unable to examine threshold differences (levels where parents recognize symptoms and begin help-seeking) or the impact of child age. Specifically, future research could use different versions of the same vignette (varied by age of vignette child, i.e., 5-year-old, 10-year-old, and 15-year-old) and ask parents to complete questionnaires based on the vignette closest to their own child's age, this might increase ecological validity. Larger, longitudinal, and more representative national sampling could be used in future studies. This is especially important due to the potential for self-selection bias in smaller, non-random studies, which could artificially inflate reports of help-seeking given that parents who are willing to participate in research studies might also be more willing to seek help. Future research could also explore the specific type of help parents would be willing to seek for their children's specific mental health problems and how service selection varies by race and ethnicity, as well as cultural factors that contribute to these differences. Construction of vignettes in future work could also take into consideration cultural variations in labeling of mental health symptoms to determine if this improves parental problem recognition for parents from various racial and ethnic groups (Chapman, Petrie, Vines, & Durrett, 2012). Qualitative studies might shed a clearer light on cultural contributors to help-seeking differences and allow for examination of the process by which parents recognize symptoms and the potential impact of stigma on problems recognition and help-seeking.

Given that many lifetime mental health problems emerge in childhood and adolescence (Kessler et al., 2005), addressing factors that contribute to underutilization in childhood is essential. Parents have been described as gatekeepers to youth mental health services (Stiffman et al., 2004), and this study showed a significant difference between parents' perceived need and clinically assessed need. Unless parents are able to perceive the need for services, they will neither initiate nor maintain treatment participation for themselves or their children.

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Appendix A

Internalizing, Externalizing, and Control Vignettes.

- A. Michael is a 10-year-old boy who has been overly worried and nervous about various things at home and school for the past 6 months. Some of his worries include getting perfect grades at school, his performance on the soccer team, and keeping his room tidy. Michael has also been experiencing some difficulty concentrating at school due to his worrying and as a result his grades are beginning to fall. He is easily tired throughout the day and is unable to sleep at night. Recently, Michael's classmates have been making fun of him. He realizes that he worries too much and wishes he could control it so he could be more like other children.
- B. Brittany is a 10-year-old girl who has become distracted easily and forgetful at home and school over the past 6 months. She often fails to finish her chores and school work and repeatedly makes careless mistakes on assignments. Brittany has difficulty paying attention for long periods of time and does not appear to listen when spoken to. She has a hard time waiting her turn, talks a lot, and often

interrupts others when they are talking. Brittany usually has difficulty playing quietly. At school, she is out of her seat constantly and has become very fidgety. Brittany has always been an active child, but her recent behavior is now affecting her school work and ability to keep and make new friends.

- C. Joshua is a 10-year-old boy who has been receiving A and B grades in school over the past 6 months. He has several friends at home and school who he enjoys spending time with. Although he usually gets along with most children, Joshua sometimes gets into minor arguments with his friends when playing games or when he does not get his way. Occasionally, when Joshua gets angry or upset, he yells or slams his door; however, once he cools down he usually feels bad and apologizes for his behavior. Joshua participates in several activities after school such as soccer and reading club.

Table 1

Demographic Variables for Parents by Race and Gender (N=251).

Variable	Statistic	Overall (n=251)	Black Fathers (n=60)	White Fathers (n=63)	Black Mothers (n=63)	White Mothers (n=65)	F Value
Age	Mean	40.00	39.36	42.05 ^a	37.84 ^a	40.73	3.07*
	SD	8.15	9.89	6.69	8.21	7.13	
Socioeconomic Status	Mean	47.76	49.03 ^b	51.22 ^{b,c}	44.92 ^b	46.02 ^c	5.13**
	SD	10.18	9.38	9.19	10.96	10.08	
Years of Education	Mean	15.90	16.03	16.67 ^d	15.69	15.26 ^d	4.49**
	SD	2.27	2.34	2.02	2.22	2.29	
Number of Children	Mean	2.45	2.88	2.27	2.52	2.26	2.59
	SD	1.22	1.53	0.97	1.58	0.97	

Note. SD=Standard deviation.

 $p < .001$,**
 $p < .01$,*
 $p < .05$ ^a Black mothers were younger than White fathers.^b Black mothers were of lower SES compared to Black fathers and White fathers.^c White mothers were of lower SES compared to White fathers.^d White mothers had fewer years of education than White fathers.

Table 2

Generalized Estimating Equation Model Examining The Effect of Vignette Type and Problem Recognition on Parents' Willingness to Seek Help.

Variable	AOR (95% CI)	Unstandardized Beta	Standard Error Estimates	Wald Chi-Square
Problem Type				
Externalizing	1.85 (1.13, 3.02)	0.62	0.25	6.08*
Internalizing	1.00 (ref)			
Problem Recognition				
Yes	41.35 (14.81, 115.49)	3.72	0.52	50.45***
No	1.00 (ref)			
Socio-demographics				
Race	1.28 (0.69, 2.37)	0.24	0.32	0.59
SES	0.98 (0.95, 1.01)	-0.02	0.02	2.23
Age	1.04 (1.01, 1.08)	0.04	0.02	4.91*

Note: AOR= Adjusted Odds Ratio.

p < .001,

**
p < .01,

*
p < .05,

†
p < .1.

Table 3

Generalized Estimating Equation Model Examining Predictors of Parental Problem Recognition.

Variable	AOR (95% CI)	Unstandardized Beta	Standard Error Estimates	Wald Chi-Square
Problem Type				
Externalizing	1.29 (0.87, 1.90)	0.25	0.20	1.60
Internalizing	1.00 (ref)			
Perceived Need	4.63 (3.30, 6.49)	1.53	0.17	78.93***
Exposure to Mental Illness				
Yes	2.17 (1.31, 3.59)	0.77	0.26	9.13**
No	1.00 (ref)			
Beliefs				
Physical	5.36 (0.49, 58.80)			
Yes	1.00 (ref)	1.68	1.22	1.89
No				
Personality/Emotional				
Yes	2.30 (0.85, 6.24)	0.83	0.51	2.69
No	1.00 (ref)			
Relational				
Yes	0.65 (0.32, 1.31)	−0.44	0.36	1.48
No	1.00 (ref)			
Family/Parenting				
Yes	0.25 (0.04, 1.45)	−1.40	0.91	2.40
No	1.00 (ref)			
Trauma				
Yes	0.12 (0.03, 0.44)	−2.10	0.65	10.30**
No	1.00 (ref)			
Friends				
Yes	1.77 (0.57, 5.48)	0.57	0.58	0.99
No	1.00 (ref)			
American Culture				
Yes	1.34 (0.72, 2.52)	0.30	0.32	0.85
No	1.00 (ref)			
Economic Problems				
Yes	1.28 (0.69, 2.37)	0.25	0.32	0.61
No	1.00 (ref)			
Discrimination				
Yes	1.21 (0.63, 2.33)	0.19	0.34	0.31
No	1.00 (ref)			
Spiritual/Religious				
Yes	1.06 (0.64, 1.75)	0.06	0.26	0.05

Variable	AOR (95% CI)	Unstandardized Beta	Standard Error Estimates	Wald Chi-Square
<i>No</i>	1.00 (ref)			
<i>Nature Disharmony</i>				
<i>Yes</i>	1.07 (0.58, 1.95)	0.07	0.31	0.05
<i>No</i>	1.00 (ref)			
Socio-demographics				
<i>Race</i>				
<i>White</i>	1.43 (0.83, 2.46)	0.36	0.28	1.64
<i>Black</i>	1.00 (ref)			
<i>Gender</i>				
<i>Female</i>	0.92 (0.56, 1.52)	-0.08	0.26	0.11
<i>Male</i>	1.00 (ref)			
<i>SES</i>	1.00 (0.97, 1.03)	0.003	0.02	0.03
<i>Age</i>	1.01 (0.98, 1.04)	0.01	0.01	0.44

Note: AOR= Adjusted Odds Ratio.

 $p < .001$,

**
 $p < .01$,

*
 $p < .05$,

†
 $p < .1$.

Table 4

Generalized Estimating Equation Model Examining Predictors of Parents' Willingness to Seek Help.

Variable	AOR (95% CI)	Unstandardized Beta	Standard Error Estimates	Wald Chi-Square
Problem Recognition				
Yes	21.59 (7.53, 61.91)	3.07	0.54	32.69***
No	1.00 (ref)			
Problem Type				
Externalizing	2.04 (1.15, 3.62)	0.71	0.29	5.88*
Internalizing	1.00 (ref)			
Perceived Need	3.62 (2.06, 6.36)	1.29	0.29	20.12***
Exposure to Mental Illness				
Yes	0.83 (0.39, 1.78)	−0.19	0.39	0.23
No	1.00 (ref)			
Beliefs				
<i>Physical</i>				
Yes	5.63 (0.12, 262.03)	1.73	1.96	0.78
No	1.00 (ref)			
<i>Personality/Emotional</i>				
Yes	0.97 (0.23, 4.16)	−0.03	0.74	0.002
No	1.00 (ref)			
<i>Relational</i>				
Yes	0.82 (0.28, 2.42)	−0.20	0.56	0.13
No	1.00 (ref)			
<i>Family/Parenting</i>				
Yes	0.59 (0.05, 6.78)	−0.53	1.25	0.18
No	1.00 (ref)			
<i>Trauma</i>				
Yes	0.43 (0.02, 10.31)	−0.84	1.62	0.27
No	1.00 (ref)			
<i>Friends</i>				
Yes	0.91 (0.26, 3.10)	−0.10	0.63	0.03
No	1.00 (ref)			
<i>American Culture</i>				
Yes	1.43 (0.62, 3.31)	0.36	0.43	0.71
No	1.00 (ref)			
<i>Economic Problems</i>				
Yes	1.69 (0.78, 3.67)	0.53	0.39	1.78
No	1.00 (ref)			
<i>Discrimination</i>				
Yes	0.55 (0.23, 1.29)	−0.60	0.44	1.91
No	1.00 (ref)			

Variable	AOR (95% CI)	Unstandardized Beta	Standard Error Estimates	Wald Chi-Square
<i>Spiritual/Religious</i>				
<i>Yes</i>	1.53 (0.73, 3.20)	0.42	0.38	1.25
<i>No</i>	1.00 (ref)			
<i>Nature Disharmony</i>				
<i>Yes</i>	0.72 (0.27, 1.91)	−0.34	0.50	0.45
<i>No</i>	1.00 (ref)			
Socio-demographics				
<i>Race</i>				
<i>White</i>	1.49 (0.73, 3.03)	0.40	0.36	1.22
<i>Black</i>	1.00 (ref)			
<i>Gender</i>				
<i>Female</i>	2.45 (1.20, 5.03)	0.90	0.37	6.01*
<i>Male</i>	1.00 (ref)			
<i>SES</i>	1.00 (0.97, 1.04)	0.001	0.02	0.003
<i>Age</i>	1.04 1.00, 1.08	0.04	0.02	3.26 [†]

Note: AOR= Adjusted Odds Ratio.

p< .001,

**
p< .01,

*
p< .05,

[†]
p< .1.