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Parent-adolescent concordance on perceived need for mental health services and its impact on service use

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Abstract

Mental health service underutilization among African American adolescents is well documented, yet not fully understood. Discordance between adolescents and their parents on perceived need for seeing a counselor for an emotional need or psychiatrist for psychiatric or medical services may help explain low service use among this population. This exploratory, prospective study examined the relationship between parent–adolescent concordance on perceived need for emotional counseling or psychiatric services and mental health service use. The relationships between gender and perceived service need and concordance and adolescent severity of depressive symptoms were also explored. Parent-adolescent dyads (n=108) receiving community-based adolescent outpatient mental health services responded to interview questions concerning their perception of whether an emotional counselor and a psychiatrist were needed in the past six months. Findings revealed low parent-adolescent concordance on perceived need for an emotional counselor and a psychiatrist. A greater proportion of adolescents reported a need than parents. There was no association between gender and perceived need for an emotional counselor and a psychiatrist. Lower rates of parent-adolescent concordance were found among youth reporting elevated depressive symptoms compared to youth reporting normal range symptoms. Concordant dyads kept a higher number of appointments than discordant dyads. Implications for clinical social work practice and future research are discussed.

Keywords

parent-adolescent; concordance; perceived need; African American adolescents; mental health services

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1. Introduction

Approximately 7% of African American adolescents, ages 12–17, experienced a major depressive episode in 2008 and nearly 70% of them did not receive mental health treatment (Substance Abuse and Mental Health Services Administration, 2009). The consequences of unaddressed mental health service needs are broad and youth may be at risk for drug use, poor school performance, family conflict, violent behavior and even suicidal behavior (US Department of Health and Human Services [US DHHS], 2001). In a nationally representative sample (N = 1,170), Joe and colleagues (2009) found that nearly half (47.3%) of African American adolescents reporting a suicide attempt had never been diagnosed, suggesting unmet mental health service need and service use. Also troubling is the fact that once African American parents of children with mental health needs are connected to services, retention rates of service use gradually decline over time (McKay, Lynn, & Bannon, 2005). The Surgeon General's report called for greater efforts to help explain the persistent underutilization of mental health services among African Americans in need of treatment (US DHHS, 2001), yet the gap between mental health service need and service use among this population persists (Wu et al., 2001; Wu, Katic, Liu, Fan, & Fuller, 2010).

Given the adverse outcomes of depression (US DHHS, 2001), multiple stressors associated with residing in high-risk urban environments (Miller & Townsend, 2005), and greater likelihood of underutilization of mental health services among youth with internalizing disorders (e.g., depression) relative to those with externalizing (e.g., disruptive) (Wu et al., 1999), more attention is needed on the examination of potential factors related to unmet mental health need among African American adolescents living in urban environments.

Therefore, this present study focuses on depressive symptoms among a sample of predominately African American adolescents living in high-risk urban environments. Although youth may enter treatment for externalizing behaviors, they may also be experiencing internalizing problems. These internalizing problems may be missed during the assessment process and thus we consider and measure adolescent depressive symptoms as a risk factor for depression and future risky behaviors, such as substance abuse and violent behavior (US DHHS, 2001).

To help explain low mental health service use among African American adolescents, researchers have examined a wide range of factors that may facilitate or prevent service use. For example, predisposing factors such as socio-demographics (e.g., lack of insurance or income), logistical or personal barriers (e.g., lack of transportation or social support), and lack of parental perception of service need (Lindsey, Barksdale, Lambert, & Ialongo, 2010; Owens et al., 2002; Wu et al., 2001) have been investigated. Little is known, however, about concordance or agreement between both parents and adolescents concerning their perceived need for services (e.g., an emotional counselor or a psychiatrist). Even less is known about parent-adolescent concordance in perceived need and its impact on mental health service use. Examining parent-adolescent (dis)concordance on the need for a counselor or a psychiatrist could offer new explanations regarding the underutilization of mental health services among African American adolescents. Consequently, we may gain new insights into how to more effectively improve and manage mental health services across the service continuum and increase service use and retention.

The primary goals of the present study were to examine (1) parent-adolescent concordance on the need for an emotional counselor (i.e., suggesting a need for individual, group and/or family therapy); a psychiatrist (i.e., suggesting a need for psychiatric services, such as a psychiatric evaluation, or medical review); and both an emotional counselor and psychiatrist, (2) the association between parent-adolescent concordance on perceived need

and severity of depression symptoms, and (3) differences in the average number of appointments kept versus appointments scheduled for concordant and discordant parent-adolescents dyads.

1.1. Parents' and adolescents' perceived need for mental health services

In previous studies, researchers have often used objective measures to evaluate or assess 'need' for adolescent mental health treatment. These measures provide indicators of depression, for example, or other clinical diagnoses, but do not indicate whether the parent and adolescent believe that mental health treatment is warranted or needed. This is an important distinction because prior research has shown that parent's perceived need for adolescent mental health services (Wu et al., 2001; Zahner & Daskalakis, 1997) and adolescents' perceived need for services (Cheng, 2009) are significant predictors of adolescent mental health service use. Hence, it is important to assess 'need' via objective measures *and* subjective measures by directly asking adolescents and parents whether they perceive a need for treatment. According to Pagura and colleagues (2009), "without a perceived need, evaluated need may not promote help-seeking" (p. 948).

Further, little attention has been given to the examination of whether parents *and* adolescents agree on the need for mental health treatment and if this agreement (or concordance) affects service use (i.e., number of appointments kept). Additionally, few studies have explored the relationship between gender and adolescent perceived need, yet some research has found that girls are more likely to report a need for professional help than boys (Zwaanswijk, Van der Ende, Verhaak, Bensing, & Verhulst, 2003).

1.2 Parent-adolescent discordance across the service use continuum

The extant research suggests that parent-adolescent discordance (i.e., disagreement) plays a fundamental role in shaping the mental health service use continuum for families from the onset of developing treatment plans and retaining adolescents in services to assessing outcomes. From the time of referral for adolescent mental health services, disagreement can exist between adolescents and parents in both their ratings of emotional and behavioral problems and their identification of target areas for treatment (Yeh & Weisz, 2001) to the receptivity to treatment options for the adolescents (Bussing, Zima, Mason, Porter, & Garvan, 2010).

Studies often find that low to moderate parent-adolescent agreement on emotional and behavioral problems is quite common with correlations ranging from .25 to .44 (Achenbach, McConaughy, & Howell, 1987; Salbach-Andrae, Klinkowski, Lenz, & Lehmkuhl, 2009). Parents often underestimate these emotional and behavioral problems, whereas adolescents overestimate. One study, for example, found that "33.8% of adolescents and 16.3% of parents reported unhappiness, sadness, or depressive mood, while 35.3% of adolescents and 18.2% of parents reported worries" (Sourander, Helstelä, & Helenius, 1999, p. 653). In this same study, 4.8% of adolescents reported an attempt to harm themselves or attempted suicide, whereas only 1.6% of parents reported observing this behavior. These wide discrepancies suggest that parents and adolescents could have two opposing views on the perception of need for mental health services and concordance may differ as a function of level of symptom severity.

As noted earlier, poor agreement also exists when parents and adolescents begin to identify target areas for treatment and consider treatment options. Yeh & Weisz (2001) found that more than 6 in 10 (63%) parent-child dyads could not agree on a specific problem area to target for treatment and 3 in 10 (33.9%) could not agree on a general problem area to target. Finally, Bussing and colleagues (2010), found poor concordance between parents and

adolescents on receptivity to the use of counseling ($\kappa = -.02$) and medication ($\kappa = .09$) among adolescents at high risk for attention deficit hyperactivity disorder (ADHD). When adolescents and parents disagree about the need for services, service providers may find it difficult to develop treatment plans and goals with families (Hawley & Weisz, 2003) and parent-adolescent communication may also become strained as families begin to decide on how to proceed with service planning and possibly, even future service use.

Even when families begin to use mental health services concordance may remain low and compromise the treatment process. For example, in a sample of adolescents being treated for anxiety disorders, discordance between parents and adolescents regarding anxiety symptoms was associated with slower treatment progress (Panichelli-Mindel, Flannery-Schroeder, Callahan, & Kendall, 1995, as cited in Kendall, Panichelli-Mindel, Sugarman, & Callahan, 1997). In another study, discordance between parents and adolescents receiving outpatient community-based therapy was associated with decreased service use (Brookman-Frazee, Haine, Gabayan, & Garland, 2008). Brookman-Frazee et al. (2008) found that parent-adolescent discordance on at least one treatment goal predicted fewer number of therapy appointments compared to parent-adolescent dyads in agreement.

Ultimately, adolescents and parents who are in disagreement may be at a higher risk for poor outcomes (Ferdinand, Ende, & Verhulst, 2006). In a sample of Dutch teenagers, ages 11–18, Ferdinand, van der Ende & Verhulst (2006) found that parent-child discordance on psychopathology at the time of referral for outpatient psychiatric services was associated with poor outcomes 4.3 years later ranging from problems at school, work, the police/judicial system, and use of drugs. The clinical significance of this study and the studies reviewed above underscore the need for additional research to examine parent-adolescent concordance and discordance on the perceived need for mental health services and its impact on service use. Furthermore, previous research has often included few, if any, African American adolescents, particularly those living in high-risk, urban environments to investigate these lines of inquiry.

1.3 The Present Study

The primary goal of this study is to examine the relationship between parent-adolescent concordance on perceived need for an emotional counselor and a psychiatrist and actual mental health service use. We also examine gender differences in perceived need, and the relationship between concordance and severity of depressive symptoms. The research questions for this study are:

1. Do parents and adolescents agree on the need for an emotional counselor?
 - 1a Do boys and girls differ on perceived need for an emotional counselor?
2. Do parents and adolescents agree on the need for a psychiatrist?
 - 2a Do boys and girls differ on perceived need for a psychiatrist?
3. Do parents and adolescents agree on the need for an emotional counselor and/or a psychiatrist?
4. Is there an association between parent and adolescent agreement on perceived need for an emotional counselor and a psychiatrist and severity of depressive symptoms?
5. Are there significant differences in the average number of appointments kept versus appointments scheduled for parent-adolescent dyads in perceived service need?
 - 5a Are there significant differences in the average number of appointments kept for parent-adolescent dyads in perceived service need?

2. Method

2.1 Procedures and Participants

Participants were recruited from a community mental health agency in a metropolitan, Midwestern city. The agency has provided services for low-income and at-risk children and families for over 80 years. Outpatient services include an education program for teenage parents, a support program for incarcerated women and their children, a support program for high-risk infants, and a family bereavement program for families whose sons or daughters have been killed, and children who are witnesses to violent crimes. Outpatient programs include child, adolescent, and family counseling, an adolescent sexual abusers program, and chemical dependency treatment and services for youth who are both emotionally and mentally impaired. Special outpatient psychiatric services, residential services, and case management services are also offered. Currently, this agency is one of the largest, most diverse and comprehensive frontline child-serving agencies in its state. The agency receives formal client referrals from local schools, hospitals, and the juvenile justice system.

The research team contacted the family via mail introducing the project, in a packet sent by the mental health-servicing agency. During the initial intake and assessment session for outpatient mental health services, agency staff presented an explanation of the study to eligible participants (ages 12–17), and invited parents and adolescents to participate separately to reduce coercion. Each parent/guardian was asked for written consent to allow the adolescent to participate in the research study and written assent was obtained from each participating adolescent. Clients were administered a depression screening tool and a brief interview asking about their perceived need for an emotional counselor and a psychiatrist. These interviews were conducted from April 2008 to March 2009. Data on number of appointments kept by adolescents were collected between May 2008 and June 2009. Inclusion criteria included adolescents ages 12–17 and one parent or guardian referred to the clinic for outpatient mental health services. Adolescents were excluded if they were a non-English speaker or, in the opinion of the professional staff, they were unstable or unfit to participate in the study due to their mental or physical status. No one was excluded for these reasons. Agency staff at the community mental health agency received a detailed training regarding study rationale, goals, data collection overview, HIPAA compliance, and recruitment procedures. A follow-up training was held eight months post study initiation to provide a review of important study procedures, introduce procedural changes and address recruitment challenges encountered by agency staff. The Institutional Review Board at the University of Michigan and the agency's Board on Evaluation and Quality approved the study protocol.

Out of the 132 potential dyads who were invited to participate in the study, 109 consented to participate and 23 refused. There were missing data for one dyad (with the exception of service use data) resulting in a final sample size of 108. The main reasons for refusal were “not enough time” and “not interested.” Among the final sample ($n=108$) of adolescent and parent dyads participating in the study, the majority of families ($n=99$) were self-referred and nine families were court-ordered for treatment. Ages of the adolescents ranged from 12 to 17 ($M=14.13$; $SD=1.52$). Adolescents' current grade in school ranged from 5th to 12th grade. Of the 108, 102 identified as African American, 2 identified as mixed race, 2 identified as Latino, and 2 identified as American Indian. Approximately 54% ($n=58$) of the adolescent sample was female.

2.2 Measures

2.2.1 Medical File Data from the Community Mental Health Outpatient

Organization—Staff of the community mental health outpatient organization provided the

researchers with electronic access to the electronic data files. These files contained the diagnostic and background information on the clients in the sample. Data on the participants' Child and Adolescent Functional Assessment Scale (CAFAS), socioeconomic status, treatment type, substance abuse, psychiatric hospital, physical health, mental health service use were also provided. This electronic file system stores a variety of information on the clients and is maintained by an Information Technology Administrator.

2.2.2 Administrative Clinical Diagnostics Data—Researchers were provided access to administrative clinical data to examine adolescents' diagnosis. As part of their treatment, adolescents received a diagnosis from the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, text revision (American Psychiatric Association, 2000). The majority of the sample received an Axis-I diagnosis of either an attention deficit/disruptive behavior disorder (51, [51.4%]) or a mood disorder (39, [35.8%]). Other diagnoses given were anxiety disorders (2, [1.8%]), schizophrenia and other psychotic disorders (1, [0.9%]), impulse-control disorders not elsewhere classified (3, [2.8%]), adjustment disorders (7, [6.4%]), or a V-code (1, [0.9%]). Most participants did not receive an Axis-II diagnosis (67, [61.5%]). Thirty-four participants (31.2%) had their Axis-II diagnosis deferred by the diagnosing clinician. Of the participants that did receive an Axis-II diagnosis, 3 (2.8%) received a diagnosis of borderline intellectual functioning, 3 (2.8%) received a diagnosis of mild mental retardation and 1 (0.9%) participant received a diagnosis of learning disorder not otherwise specified. Global Assessment of Functioning (GAF) scores ranged from 35 to 65 with a mean of 45.93.

2.2.3 Perceived need for an emotional counselor and a psychiatrist—The two main treatment services provided to adolescents and families at the community based mental health agency are counseling (i.e., individual, group, and/or family therapy), and psychiatric services (e.g., evaluation, medical review). As a result, the questions developed to ascertain parental perceived need for these types of services were: “In the last 6 months, *has your child* needed an emotional counselor?” and “In the last 6 months *has your child* needed a psychiatrist?” (coded 1 = yes; 0 = no). Adolescents answered the same questions: “In the last 6 months, *have you* needed an emotional counselor?” and “In the last 6 months, *have you* needed a psychiatrist?” The term ‘emotional counselor’ was adapted from the Child and Adolescent Services Assessment (CASA) (Burns, Angold, Magruder-Habib, Costello, & Patrick, 1996) to differentiate between the guidance of other types of counselors the children may have worked with in the past (e.g., guidance counselors, religious counselors). The term is specific and refers to mental health counseling. In this way, an ‘emotional counselor’ is differentiated from a doctor (i.e., ‘a psychiatrist’).

2.2.4 Concordance on perceived need for an emotional counselor and a psychiatrist—Concordance was indicated by both the parent and adolescent reporting yes (both agree) or both reporting no (both disagree) to each question asking about the need for an emotional counselor or a psychiatrist within the past six months. One respondent reporting yes and the other respondent reporting no (mixed responses) indicated discordance or disagreement.

2.2.5 Service Use—Data on the number of appointments kept and scheduled are recorded through the agency's administrative database system. The number of appointments kept represents the number of times the child attended their scheduled appointments from May of 2008 through June of 2009. This number was used to assess the average number of appointments kept based on concordant and discordant dyads. We also assessed the average number of appointments kept versus scheduled per concordant and discordant dyad. The number of appointments kept varies due to a number of factors, including different lengths

of treatment and when each participant entered treatment, as some participants were still in treatment at the end of June 2009. Clinicians at the participating agency use 'attendance codes' when completing billable and non-billable progress notes to document the client's treatment. These attendance codes include "not client related, appointment kept, walk-in, emergency, cancelled by client, cancelled by staff, no show and client not present." For all youth in the study with service use data ($n = 109$), the range for the number of appointments kept was 1 to 87 ($M = 15.71$) and the range for the number of appointments scheduled was 2 to 110 ($M = 22$).

2.2.6 Severity of Depressive Symptoms—The *Reynolds Adolescent Depression Scale* 2nd edition (RADS-2; Reynolds, 2002), which was developed to evaluate the severity of depressive symptoms in adolescents ages 11–20 was used to measure depressive symptoms. The RADS-2 was designed for individuals with at least third grade reading ability.

Adolescents answered 30 items on a 4-point Likert scale that requires a response of whether a symptom-related item occurred: "Almost Never," "Hardly Ever," "Sometimes," or "Most of the time." The items are framed in the present tense, which requires the adolescent to respond based on how they currently feel. The 30 items provide scores across four subscales: (1) Dysphoric Mood (e.g., "I feel sad."), (2) Anhedonia/Negative Affect (e.g., "I feel important."), (3) Negative Self-Evaluation (e.g., "I feel I am no good."), and (4) Somatic Complaints (e.g., "I have trouble sleeping."). Of the 30 items, 7 items are scored in reversed order. These items are phrased in a positive manner so that reversing the scoring key represents greater depressive symptomatology. Adolescents' responses are weighted 1 to 4 points, so that the RADS-2 total raw score ranges from 30–120. Adolescents who scored within the range of 30–75 were considered to be in the normal clinical depression range, 76–81 in the mild clinical depression range, 82–88 in the moderate clinical depression range, and 83–120 in the severe clinically depressed range. For the purpose of the current study, the total raw score of 76 was used as the clinical cutoff score to distinguish between those reporting normal range depressive symptoms (30–75) and those reporting mild to severe depressive symptoms (76–120) (Reynolds, 2002). The RADS-2 total raw score provides the clinical severity of depressive symptomatology in adolescents and although it is highly correlated with DSM-IV diagnosis for Major Depressive Disorder, it does not provide a formal diagnosis. In a sample of diverse youth ($n=9,052$), Cronbach's alpha for the depression total score was .93. A 2-week test-retest reliability for school ($n=1,765$) and clinical ($n=70$) samples was .85 and .89, respectively, for the depression total score (Reynolds, 2002). The Cronbach's alpha reliability coefficient for the 30 items in this sample is 0.90, which indicates strong internal consistency of the items in the scale.

2.3 Analysis

The McNemar's Test was conducted to explore concordance between parent and adolescent reports of perceived need for an emotional counselor and a psychiatrist. The Bowker's Test was also conducted to test agreement between parents and their children on perceived service need. Kappa statistics were computed to measure the level of concordance and correct for chance agreement. The chi-square statistic was used to test for associations across categorical variables. An ANOVA was conducted to assess the average number of appointments kept versus appointments scheduled and average number of appointments kept for parent-adolescent dyads in perceived service need. Statistical significance was determined at the $p < .05$ level on a 2-sided design-based test of significance and represented the cut-off value for assessing statistical significance. The sample size for some analyses may vary due to missing data. PASW Statistics version 18 (formerly SPSS) was used to perform all analyses.

3. Results

3.1 Parent and adolescent agreement on the need for an emotional counselor

Concordance between parent and adolescent reports on the need for an emotional counselor was poor ($\kappa = 0.09$). This finding revealed significant differences in the proportion of parents and adolescents reporting a perceived need for a counselor ($\chi^2 = 5.33, p = .02$). Out of 104 parent-adolescent dyads, only 22 (21%) were in agreement on the need for a counselor. Further, whereas 52% of adolescents perceived a need for an emotional counselor, only 37% of parents perceived such a need (See Table 1). Boys and girls did not differ in their perceived need for an emotional counselor ($\chi^2 = 1.41; p = .24$) (Table 2).

3.2 Parent and adolescent agreement on the need for a psychiatrist

Concordance between parent and adolescent reports on the need for a psychiatrist was poor ($\kappa = 0.29$) and there was no statistically significant difference in the proportion of parents and adolescents reporting a need for a psychiatrist ($\chi^2 = 1.78, p = .18$). Out of the 104 parent-adolescent dyads, nearly half (42%) were in agreement on the need for a psychiatrist. A slightly higher proportion of adolescents perceived a need for a psychiatrist (64%) compared to parents (56%) (Table 1). Boys and girls did not differ in their perceived need for a psychiatrist ($\chi^2 = 0.37; p = .54$) (Table 2).

3.3 Parent and adolescent agreement on the need for an emotional counselor and/or a psychiatrist

Concordance between parent and adolescent reports on the need for a counselor and/or psychiatrist was poor ($\kappa = 0.07$). Although there was a trend toward significance ($\chi^2 = 6.91, p = .07$), this finding revealed no statistically significant difference in the proportion of parents and adolescents reporting a need for a counselor and/or psychiatrist. Only 20% ($n = 21$) of parent-adolescent dyads were in agreement on the need for both a counselor and a psychiatrist, demonstrating low concordance. Roughly 43% of adolescents perceived a need for both a counselor and a psychiatrist, and 35% of parents perceived a need for both (Table 3).

3.4 Association between parent and adolescent agreement on perceived need for an emotional counselor and psychiatrist, and severity of depressive symptoms

There was a significant association ($p < .001$) between parent-adolescent agreement on the perceived need for a counselor and a psychiatrist and severity of depressive symptoms. Based on the level of depressive symptoms, parent-adolescent perceived need differed. Out of the 31 adolescents reporting mild to severe depressive symptoms, only one parent-adolescent dyad agreed that both a counselor and a psychiatrist were needed, compared to 20 dyads (out of 77 adolescents) reporting in the normal range of depression symptoms (Table 4).

3.5 Differences in the average number of appointments kept versus appointments scheduled; and average number of appointments kept for parent-adolescent dyads in perceived service need

There were no significant differences between dyads on the average number of appointments kept versus scheduled, $F(2, 101) = 1.62, p = .20$, nor were there significant differences in the average number of appointments kept based on parent-adolescent dyads perceived need for a counselor and/or a psychiatrist, $F(2, 101) = .95, p = .39$ (Table 5 & 6).

3.6 Additional Analyses for Primary Diagnosis, Age, and Gender

Because of the varying diagnoses among the adolescents, we sought to determine whether there was an association between primary diagnosis and parent-adolescent concordance on the need for a counselor and a psychiatrist (analyses not shown). We categorized diagnoses by internalizing behaviors (i.e., mood, anxiety, thought), externalizing behaviors (i.e., ADHD and behavior), and adjustment. Parent-adolescent dyads were categorized as dyads reporting a need for both a counselor and psychiatrist, reporting no need for a counselor and psychiatrist, reporting a need for either a counselor or psychiatrist, and disagreement on the need for services. We conducted a Fisher's exact test and the result was non-significant ($p = .29$). Primary diagnosis was not associated with parent-adolescent concordance.

To determine whether there were age differences by developmental stages (i.e., 12–15 vs. 16–17) on the perceived need for an emotional counselor and a psychiatrist, we conducted chi-square analyses (not shown) and found no significant results. That is, younger youth ages 12–15 did not differ from older youth 16–17 on the perceived need for an emotional counselor ($\chi^2 = 0.01$, $p = .92$) and a psychiatrist ($\chi^2 = 1.57$, $p = .21$). We also conducted a Fisher's exact test to examine the association between age and parent-adolescent concordance on perceived need for mental health services (not shown). Parent-adolescent dyads were categorized in the four groups described above. The result of this analysis also revealed no significant association between age (younger vs. older youth) and parent-adolescent concordance on perceived need for mental health services ($p = .34$).

Lastly, we explored whether there were gender differences: in the average number of appointments kept versus scheduled, parent-adolescent dyads in perceived service need, and whether gender moderated the relationship between parent-adolescent concordance and the average number of appointments kept versus scheduled. We found that boys and girls did not significantly differ ($t = -0.54$; $p = .59$) in the average number of appointments kept versus scheduled. A Fisher's exact test showed no association between gender and parent-adolescent concordance on perceived service need ($p = .43$). Lastly, a two-way ANOVA to examine the gender effect on parent-adolescent concordance on perceived need for mental health services and average number of appointments kept versus scheduled revealed no significant interaction effect of gender ($f = .95$, $p = .39$).

4. Discussion

This study sheds light on parent and adolescent concordance on perceived need for an emotional counselor and a psychiatrist and the potential impact this type of concordance may have on outpatient mental health service use among predominately African American families. Results revealed that a greater proportion of adolescents perceived a need for an emotional counselor than parents (52% vs. 37%, respectively), suggesting low concordance. This is consistent with prior research that has shown that parents often underestimate adolescents' mental health functioning (Roberts, Alegria, Roberts, & Chen, 2005) and poor concordance exist between parents and adolescents on the use of counseling services (Bussing et al., 2010). This suggests that parents may be unaware of their child's emotional needs for counseling or other supportive services, and therefore, unable to attend to or meet their child's needs. This is an important finding given how undetectable emotional needs can be (Wu et al., 1999) and that African American youth are not likely to reach treatment for these needs.

From a developmental perspective, youth “become more introspective and self-aware” (Sigelman & Rider, 2006, p. 514) during the adolescent phase and are able to reflect on their personal feelings and experiences. Therefore, adolescents may be more likely to perceive a need for emotional help than their parents, who may rely more heavily on adolescents'

observable behaviors to detect a need for professional help. This suggests that adolescents can contribute valuable information during the initial assessment of mental health problems and the need for services. Additionally, in this sample, adolescents seem to be a reliable source of information regarding the need for an emotional counselor relative to their parents.

Interestingly, the results did not bear any significant gender differences in perceived need for an emotional counselor or a psychiatrist. Although it has been noted that girls develop an awareness of self and self-reflection at a faster pace than boys (Oyserman & Fryberg, 2006). A larger sample size may be able to detect gender differences in adolescents' perception of need.

The findings also revealed low concordance between parents and adolescents on the perceived need for a psychiatrist. If in fact parents and adolescents had low concordance on the need for a psychiatrist as it relates to a psychiatric evaluation for medication, related research such as Bussing et al. (2010) also found low concordance on treatment receptivity to the use of medications between parents and adolescents. Interestingly, this study found that a greater proportion of parent and adolescent dyads perceived a need for a psychiatrist than a counselor (42% vs. 21%, respectively). Other studies have found that parents and adolescents prefer counseling to medications (Bradley, McGrath, Brannen, & Bagnell, 2010; Jaycox et al., 2006; Stevens et al., 2009). Perhaps, these families were seeking a 'second opinion' regarding a diagnosis or a medication review because the adolescent's medication was 'not working.' Briefly, Stevens and colleagues (2009) found that parents perceived antidepressants as beneficial when their children exhibited internalizing behaviors. This has implications for service use as Bussing et al. (2010) found that parents and adolescents who were receptive to medication had increased past 12 months service use.

Further findings revealed marginally significant differences between three distinct parent-adolescent dyads: parents and adolescents both reporting yes to the need for a counselor and psychiatrist, both reporting no, and parents and adolescents reporting yes to the need for either a counselor or a psychiatrist. Parents and adolescents reported similar responses to the need for both a counselor and psychiatrist. Most striking, however, was that 44 adolescents reported a need for both a counselor and a psychiatrist and 44 parents reported that both were not needed. This clear discrepancy between parents and adolescents could have serious implications for service use considering that parents are the key initiators of child mental health service use and their ability to recognize child problem behavior is strongly related to use of these services (Syal, Taylor, & Beecham, 2003).

Parent-adolescent concordance differed by depression severity. This is consistent with prior research (Yeh & Weisz, 2001). Out of the 77 adolescents reporting in the normal range of depressive symptoms, 20 dyads (or 19%) perceived a need for both a counselor and a psychiatrist. This could suggest that these adolescents had open communication with their parents concerning their emotional and behavioral needs prior to seeking services and felt supported in their seeking of help. These adolescents may also be seeking an outlet to express emotions and feelings that he or she is unable to express fully at home or with peers (Lindsey et al., 2006). There appeared to be a greater number of concordant dyads who perceived a need for a counselor, psychiatrist, or both for youth reporting normal range depressive symptoms (n=22) compared to those youth reporting mild to severe depressive symptoms (n=3), suggesting that there was less concordance among youth with the greatest need for services. It could be that those adolescents with greater depressive symptoms felt more stigmatized in receiving mental health services (Rose, Joe, & Lindsey, 2010), including their parents. This could also reflect the issue of 'help negation' as it has been noted that those with elevated mental health symptoms are less likely to seek help (Wilson & Deane, 2010) and perhaps not as likely to perceive a need for mental health services.

Lastly, adolescence is usually a period when youth develop independence from parents and move toward autonomy (Wolfe & Mash, 2006). During this transitional phase, youth may experience conflict with parents (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997) that could cause a breakdown in communication. Under these circumstances, youth with depressive symptoms may not readily avail themselves to share or communicate their internal feelings with parents, which could result in discrepancies in adolescent and parent perceived need for mental health services.

Also concerning is the fact that there was disagreement between 19 dyads wherein the adolescent reported mild to severe depressive symptoms. Given that adolescents, in general, were more likely than their parents to perceive a need for a counselor and a psychiatrist, this finding may again suggest that parents underestimate the severity of their child's mental health needs. Because minority parents are less likely to recognize mental health problems in their youth relative to Caucasian parents (Roberts et al., 2005), the finding that adolescents with greater need have less concordance with their parents on perceived need for services could be considered as an additional barrier to mental health services and consequently further delay receipt of needed services. This is especially concerning given the added stressors African American families experience when living in high-risk and stressful environments (Miller & Townsend, 2005).

4.1 Limitations

The following limitations should be considered when interpreting the results. This study did not assess parental report of adolescent depressive symptoms and thus it is not clear if lack of agreement about depressive symptoms may be an explanation for the discrepancies in perceived need. Future research should assess both parent and child reports of depressive symptoms. Additionally, information on parents and adolescents perception of the quality of service provision during the initial intake appointment was not obtained. This could be useful information in understanding parent-adolescent disagreement on the need for services and future service use. This study sought to examine both facets of concordance and defined concordance (like previous studies) as parents and adolescents both expressing a need for services and both reporting that there is no need for services. Discordance was traditionally defined as contrasting responses from respondents. This present study was also consistent with other research in defining service use (McKay, Stoewe, McCadam, & Gonzales, 1998) and therefore, our definition does not pose as a potential limitation to the findings. However, our sample size may have had limited power to detect significant differences between concordant and discordant dyads. Future replications of this study should employ a larger sample size. Another limitation of the study is that the reasons for the perceived need for a psychiatrist are unknown and could vary from a need for a psychiatric evaluation, medical or medication review to medication management. Lastly, this is an inner-city community based agency and the families in this sample may not be representative of other families seeking and receiving services in other mental health settings (e.g., rural, suburban, serving more economically advantaged families).

4.2 Implications

The study's findings offer important implications for clinical practice and future research. For practitioners, this study suggests the need to reach agreement regarding the need for a counselor and/or a psychiatrist prior to or during the first appointment. Parents and adolescents each play an essential role in deciding whether services are needed. Taking steps early on to educate families about different treatment options and understand parent and adolescent perspectives regarding these services should drive the initial steps of building trust and an alliance with families (DiGiuseppe, Linscott, & Jilton, 1996). Practitioners should routinely query parents and adolescents about their perception of need for services,

including agreement on the identified problem behaviors, target areas for treatment, treatment options, and the scope of the service plan as disagreement may prove as a barrier to future service use (Zwaanswijk, Van Der Ende, Verhaak, Bensing, & Verhulst, 2007).

More ethnographic research is necessary to gain a richer understanding of the nuanced issues that may impinge upon perceptions of need by adolescents and their parents. For example, understanding help negation as a barrier among adolescents with elevated emotional and behavioral symptoms will be an important consideration during the early stages of working with families. Further, ethnographic research may provide a clearer picture of acceptable therapeutic means (i.e., counseling, medication, other resources or supports) to address adolescent mental health problems, a line of inquiry key to informing ways of reaching agreement with families. This new knowledge should inform the design, development, and implementation of interventions that focus on practitioner's role in facilitating agreement between parents and adolescents from the onset of treatment.

Finally, intervention research should be conducted to examine the impact of parent-adolescent agreement on service provision, service use and outcomes. For example, future research should entail a systematic approach to checking in with families on a routine basis to assess concordance as a potential barrier to service use. Moreover, assessing concordance prior to intake appointments may be critical to service engagement and facilitating the use of mental health treatments. Lastly, parents and adolescents may not only differ in their perception in the need for services, but they may also differ in their choice for services and level of participation in treatment, which may influence adolescents' perception of need for services. These potential pathways of influence should also be investigated and examined in relation to service use and outcomes.

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Research Highlights

- Parents and adolescents differed in perceived need for an emotional counselor.
- Parents and adolescents did not differ in perceived need for a psychiatrist.
- Adolescents perceived greater need for mental health services than did parents.
- There was less concordance among adolescents with elevated depression symptoms.
- Concordant dyads kept a higher number of appointments than discordant dyads.

Table 1

Parent and adolescent agreement on the need for an emotional counselor and a psychiatrist

	Adolescent Perceived Need (N=104)		McNemar's Test	Kappa (95% CI)
	Yes N(%)	No N(%)		
Parent Perceived Need for an Emotional Counselor				
Yes	22(21.15)	16(15.39)	38 (36.54)	
No	32 (30.77)	34 (32.69)	66 (63.46)	
Total	54 (51.92)	50 (48.08)	104 (100)	S=5.33;p=.02 0.09 (-0.10-0.27)
Parent Perceived Need for a Psychiatrist				
Yes	44 (42.31)	14 (13.46)	58 (55.77)	
No	22 (21.15)	24 (23.08)	46 (44.23)	
Total	66 (63.46)	38 (36.54)	104 (100)	S=1.78;p=.18 0.29 (0.10-0.47)

Table 2

Gender differences on perceived need for an emotional counselor and a psychiatrist

	Boys N(%)	Girls N(%)	Total N(%)	X ² ; P-value
Perceived Need for an Emotional Counselor				
Yes	29(26.85)	27(25.00)	56(51.85)	
No	21(19.45)	31(28.70)	52(48.15)	
Total	50(46.30)	58(53.70)	108(100)	1.41; .24
Perceived Need for a Psychiatrist				
Yes	33(30.56)	35(32.40)	68(62.96)	
No	17(15.74)	23(21.30)	40(37.04)	
Total	50(46.30)	58(53.70)	108(100)	0.37; .54

Table 3

Parent and adolescent agreement on the need for an emotional counselor and/or a psychiatrist.

Parent Perceived Need	Adolescent Perceived Need (N=104)				Total N(%)	Bowker's Test	Kappa (95% CI)
	Yes to Both Counselor and a Psychiatrist N(%)	No to Both Counselor and a Psychiatrist N(%)	Yes to Either Counselor or a Psychiatrist N(%)				
Yes to Both	21 (20.19)	5 (4.81)	10 (9.61)	36 (34.61)			
No to Both	11 (10.58)	14 (13.46)	19 (18.27)	44 (42.31)			
Yes to Either	12(11.54)	8(7.69)	4(3.85)	24(23.08)			
Total	44(42.31)	27(25.96)	33(31.73)	104(100)	S=6.91;p=.07	0.07	(-0.06-0.20)

Table 4

Association between parent and adolescent agreement on perceived need for an emotional counselor and a psychiatrist, and severity of depressive symptoms.

	Severity of depressive symptoms (N=108)			
	RADS < 76 N(%)	RADS 76 N(%)	Total N(%)	F-value; p-value
Parent-adolescent Perceived Need				
Yes to Both a Counselor and Psychiatrist	20(18.52)	1(0.92)	21(19.44)	
No to Both a Counselor and Psychiatrist	5(4.63)	9(8.33)	14(12.96)	
Yes to Either a Counselor or Psychiatrist	2(1.85)	2(1.85)	4(3.70)	
Disagreement	50(46.30)	19(17.60)	69(63.90)	
Total	77(71.30)	31(28.70)	108(100)	0.00001; p=.0007

Note: Agreement refers to parent-adolescent dyads reporting 'yes to both a counselor or psychiatrist,' 'no to both a counselor and psychiatrist,' and 'yes to either a counselor or psychiatrist.' Disagreement refers to parents and children reporting different responses.

Table 5

Differences in the average number of appointments kept versus appointments scheduled for parent-adolescent dyads in perceived service need.

	Appointment Kept (N=104)		
	N(mean)	95% CI of mean	F-value; p-value
Parent-adolescent Perceived Need			
Counselor or a Psychiatrist	25(0.74)	0.68 – 0.79	1.62; p = .20
No to Both a Counselor and Psychiatrist	14(0.76)	0.68 – 0.85	
Disagreement	65(0.69)	0.65 – 0.73	

Table 6

Differences in the average number of appointments kept between concordant and discordant parent-adolescent dyads.

	Appointment Kept (N=104)		
	N(mean)	95% CI of mean	F-value; p-value
Parent-adolescent Perceived Need			
Counselor or a Psychiatrist	25(17.60)	9.99 – 25.21	0.95; p = .39
No to Both a Counselor and Psychiatrist	14(19.50)	8.60 – 30.40	
Disagreement	65(14.40)	11.56 – 17.24	