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Abstract

Latinx caregivers underutilize traditional youth mental health services (MHS) relative to their White counterparts. Disparities may be explained by barriers preventing engagement in traditional MHS. A potential mismatch between available services and preferred culturally appropriate healing practices may also contribute to treatment disparities. The current study examined Latinx caregivers’ perceived need for and utilization of support services in relation to family characteristics, youth problem-type, and barriers to care. Findings were contextualized by assessing caregiver preferences for addressing youth psychopathology. The study consisted of 598 Latinx caregivers from across the United States. Descriptive statistics and binary logistic regression models were used to conduct exploratory analyses. The most frequently used sources of support for youths were medical doctors, school professionals, family or friends, psychological counseling or therapy, and parenting classes. Caregiver perceived need and utilization of services was generally greater among youth with clinically elevated internalizing or externalizing problems. While Latinx caregivers report needing and utilizing a variety of services to address youth psychopathology, they frequently ranked psychological counseling as their most preferred format. Problem-specific service need, and utilization was found for medical (i.e., clinical internalizing problems) and religious services (i.e., minister or faith healer; clinical externalizing problems). Youth and family characteristics and barriers to care were differentially associated with service need and utilization across formats. Our findings suggest a need to increase access to youth psychological counseling services among Latinxs and highlight additional avenues for integrating MHS into formats that caregivers frequently report needing and utilizing.

Keywords: Latinx, mental health services, perceived need, utilization, youth
Highlights

- Caregivers utilize a variety of services to address youth mental health problems
- Caregivers preferred formal psychological counseling over alternative formats
- Efforts are needed to increase access to youth psychological counseling
- Frequently needed and used formats present opportunities for service provision
Youth Mental Health Service Preferences and Utilization Patterns Among Latinx Caregivers

1. Introduction

Access to youth mental health services (MHS) among Latinx families is an area of great disparity (Merikangas et al., 2011), as caregivers experience significant barriers to accessing MHS for their youth (Malhotra et al., 2015). These disparities in utilization may reflect a cultural mismatch between the services that mental health providers offer and those that minority caregivers’ access and view as preferred methods of address youth psychopathology (Vázquez & Villodas, 2019; Wampold, 2001). The current literature has a narrow focus on utilization patterns and correlates of traditional MHS (i.e., psychological counseling, telepsychology; Vázquez et al., 2021; Galvan & Gudiño, 2019), which has contributed to a limited understanding of informal sources of support that Latinx caregivers may access to address youth psychopathology (Kapke & Gerdes, 2016). Furthermore, research has yet to consider youth MHS utilization patterns among Latinxs within the context of caregiver preferences for treatment. Examining a wider array of support services and considering Latinx caregivers’ preferences for youth MHS could help identify high value formats for the delivery of evidence-based interventions within this populations (McHugh et al., 2013). The present study conducted a broad examination of youth support service utilization patterns and its correlates. Results from these analyses were considered within the context of Latinx caregivers’ preferences for addressing youth psychopathology.

1.1. Understanding Mental Health Service Need and Utilization

Understanding Latinx caregivers’ preferences for addressing specific youth disorders could reduce MHS disparities through the adaptation of existing evidence-based interventions
into formats that are more accessible and culturally congruent. This is important as cultural beliefs regarding mental illness and its treatment may influence service utilization patterns among Latinx caregivers. Wampold’s (2001) Contextual Model suggest that utilization of healing practices (i.e., approaches and knowledge used to address pathology) is a culturally grounded behavior. Engagement in healing practices is associated with cultural beliefs regarding the cause of an illness and the congruent methods of intervening. Latinx caregivers view an intervention through their cultural lens and assess whether it represents a trusted source of support that poses the ability to address their youth’s problems (Cauce et al., 2002).

Latinx culture prioritizes addressing problems within the family or close social network, which may delay or deter caregivers from engaging in traditional youth MHS (Kapke & Gerdes, 2016). Furthermore, Latinx caregivers may hold cultural beliefs regarding the causes of mental illness that could inform their selection of appropriate MHS (e.g., religious services for spiritual causes, medical services for biological causes; Kouyoumdjian et al., 2003). While Latinx caregivers make culturally grounded decisions regarding the match between youth mental health problems and congruent interventions, much of the service utilization literature has focused on examining traditional methods of addressing youth psychopathology that may or may not be culturally congruent healing practices among Latinxs (e.g., psychological counseling, primary care, school counseling, psychiatric hospitalization; Gudiño et al., 2008; Gudiño et al., 2009; Gudiño et al., 2012).

Outpatient psychological therapy, school counseling, and primary care are among the most commonly utilized youth MHS (Duong et al., 2020). Caregivers may also utilize crisis hotlines for suicidal behavior and psychiatric hospitalization for youth who present with severe psychopathology (Duong et al., 2020; Gould et al., 2012). While Latinx caregivers may utilize
these traditional MHS formats, they may prefer more informal sources of support for addressing youth psychopathology (i.e., support groups, ministers or faith healers, family or friends). Informal supports may be viewed as less stigmatizing and more socially acceptable methods of intervention, particularly when families have strong social support networks (Cabassa et al., 2006; De Silva et al., 2020; Garland et al., 2005; Ingram, 2007; Villatoro et al., 2014). Recent research has also drawn attention towards the need to consider intervention formats such as parenting classes, mentorship programs, and online support groups that caregivers may associate with youth psychopathology (Cavell et al., 2021; Griffiths, 2017; Vázquez & Villodas, 2019).

Much of the current literature has focused on examining differences in utilization between racial/ethnic groups for specific traditional MHS (i.e., psychological counseling, school counseling; Gudiño et al., 2009; Gudiño et al., 2012) or collapse multiple service types under the category of “specialty services” (i.e., psychological counseling; psychiatrist, partial hospitalization; Gudiño et al., 2008). While these studies have advanced our knowledge regarding MHS disparities, there continues to be a limited understanding of MHS preferences and utilization patterns among Latinx caregivers.

Conceptual models of MHS utilization provide a framework for broadly understanding help-seeking behaviors among Latinx caregivers. Caregivers’ decisions to utilize youth support services begins with problem recognition (i.e., clinical need, caregiver perceived need), which informs subsequent help seeking and utilization of selected intervention formats (Cauce et al., 2002; Srebnik et al., 1996). This process is shaped by predisposing characteristics (e.g., age, gender, race/ethnicity), the illness profile (e.g., definition of a behavior as a mental health disorder, knowledge regarding mental health), and barriers to services (e.g., income, availability, insurance, stigma, fear of discrimination; Srebnik et al., 1996). The families’ culture influences
every step of this process. Perceived need is an especially relevant component when examining service utilization patterns among racial/ethnic minorities as differences exist in perceptual threshold that determine whether youth problems warrant intervention (Cauce et al., 2002). These conceptual models highlight the importance of considering the families’ characteristics, culture, and context when exploring factors associated with youth support service need and utilization.

1.2. Predisposing Characteristics

Predisposing characteristics are factors associated with a higher propensity for MHS utilization, which include youth’s age, gender, and minority status (Srebnik et al., 1996). Although increases in child age are associated with lower odds of utilizing youth counseling service (Gudiño et al., 2009), different challenges may be experienced during the course of development that could influence what support services are accessed (Kapke & Gerdes, 2016). For example, caregivers of younger children may find parenting classes to be more appropriate and effective (Gardner et al., 2010), while caregivers of adolescents may perceive a need for mentorship programs to address externalizing problems (Vázquez & Villodas, 2019). Research has also documented binary gender differences in service utilization patterns of traditional MHS. Specifically, Latinx caregivers are more likely to utilize traditional MHS for boys relative to girls (i.e., psychological counseling, psychiatric hospitalization, school counseling; Cabiya et al., 2006). No known research has reported on gender-based differences in caregiver perceived need for and utilization of non-traditional MHS formats. There are also significant disparities in youth MHS utilization among racial/ethnic minorities relative to Whites (Malhotra et al., 2015). However, research has yet to examine within group race-based differences in service utilization patterns, despite evidence suggesting that darker skinned Latinxs experience more systemic
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1.3. The Illness Profile

The illness profile refers to factors influencing problem recognition and selection of the intervention format (Srebnik et al., 1996). Awareness of whether youth mental health problems require treatment are likely influenced by caregivers’ cultural beliefs regarding MHS (Cauce et al., 2002). Racial/ethnic differences exist in perceptual thresholds for distress, which may be specific to symptom presentations (e.g., internalizing and/or externalizing; Vázquez & Villodas, 2019). Gudiño and colleagues (2012) found differences in problem-specific (i.e., internalizing and externalizing) utilization of psychological counseling, such that when Black caregivers reported that their adolescent had an externalizing problem, they were more likely to use psychological counseling services than White caregivers. Latinx caregivers also utilized psychological counseling services at higher rates if their child had externalizing problems but service utilization was not significantly different from White adolescents. Other research has found that Latinx families are more likely to utilize MHS in response to adolescent internalizing problems relative to White families, but do not differ in accessing services for externalizing problems (Merikangas et al., 2011). Vázquez and Villodas (2019) expanded on this research by examining disorder-specific utilization of a variety of support services (i.e., parenting classes, psychological counseling, mentoring programs) among Black and White caregivers. Their findings suggest that Black caregivers were more likely than White caregivers to report a need
for mentorship programs if their youth had clinically elevated externalizing problems. Although racial/ethnic minority caregivers may endorse the presence of clinically elevated mental health symptoms, the likelihood of service utilization may be problem- and service-specific.

Research examining problem-specific service utilization patterns and correlates among Latinxs have focused on specialty and medical services. Galvan and Gudiño (2019), found that Latinx caregivers’ likelihood of utilizing in-person youth MHS for internalizing problems varied as a function of acculturation with higher caregiver acculturation leading to greater use of in-person services. Conversely, externalizing problems were not significantly associated with youth MHS utilization. Other research has found that Latinx caregivers report a need and utilizing telepsychology services for youth with clinically elevated internalizing problems but not those with externalizing problems after account for other factors (Authors, 2021c). These results may also reflect the impact of greater caregiver acculturation on youth MHS utilization among Latinxs (Ho et al., 2007). Differences in service utilization patterns associate with acculturation may reflect the impact of cultural values on help-seeking among Latinxs. For example, Anastasia and Bridges (2015) examined the impact of the cultural value of fatalism on mental health and medical service for depression among Latinxs. Their findings suggest that fatalism was negatively associated with medical service use but not MHS. However, depression moderated the relationship between fatalism and MHS utilization, suggesting that cultural values may differentially impact Latinxs’ decisions regarding MHS selection. Despite these findings, research has yet to examine problem-specific perceived need and utilization of a wider array of support services that Latinx families may access to address youth psychopathology.

1.4. Barriers to Services
Latinx caregivers face obstacles to accessing youth MHS such as transportation, income, insurance, and language barriers (Kataoka et al., 2002; Scheppers et al., 2006). Latinx caregivers also commonly report fears regarding being judged by medical or mental health providers, having their children be overmedicated, or losing custody (De Silva et al., 2020), which may deter them from utilizing formal youth MHS. When parents do engage in treatment, reports of dismissiveness, feeling blamed by providers, or lack of treatment plan alignment can act as barriers to continued engagement in treatment (De Silva et al., 2020). While these barriers do not solely or uniquely impact Latinxs, they do present obstacles to seeking formal MHS within a population that may already prefer to handle mental health problems within their family or close social network (Kouyoumdjian et al., 2003). Latinx caregivers may be more likely to utilize informal intervention formats as they pose fewer perceptual (e.g., stigma and fear) and structural challenges (e.g., ease of access, availability within community) relative to formal interventions (Stiles et al., 2019). However, the assertion regarding the relationship between barriers to MHS and Latinx caregiver perceived need for and utilization of non-traditional youth support services has yet to be tested.

1.5. The Current Study

Investigators continue to highlight gaps in understanding correlates of MHS utilization and equivocal findings are common. This may be due to racial/ethnic differences in utilization patterns due to dynamic factors such as family characteristics, cultural beliefs regarding causes of mental illness, preferences for addressing youth psychopathology, and structural barriers to services (Cauce et al., 2002). Examining MHS utilization patterns and preferences beyond traditional formats could uncover other sources of support that caregivers may associate with specific youth mental health problems and fewer barriers to care (Merikangas et al., 2011;
Our aims were to first conduct an exploratory analysis of Latinx caregivers’ perceived need for and utilization of support services and their association with specific youth (i.e., age, gender, skin tone) and family (i.e., household income) characteristics, problem-types (i.e., internalizing, externalizing problems), and barriers to care. Secondly, we aimed to contextualize these findings through the consideration of caregiver reported preferences for addressing specific youth psychopathology (i.e., internalizing, externalizing problems).

Consistent with prior research, we hypothesized that Latinx caregivers would utilize a wide array of formal and informal support services to address youth psychopathology. However, we expected that Latinx caregivers would prefer informal sources of support (e.g., support groups, ministers or faith healers, family or friends) relative to traditional MHS (e.g., psychological counseling, school counseling). Caregivers of youth who were boys, had darker skin tones, greater barriers to care, and/or lower household income were expected to be less likely to report needing or utilizing traditional MHS. Youth age was expected to differential impact caregiver reported need and utilization across formats. As prior research has yet to examine predictors of caregiver perceived need for and utilization of informal support services among Latinxs, analyses examining correlates of these outcomes should be considered exploratory in nature.

2. Method

2.1. Procedure and Sample Characteristics

A nationwide survey of Latinx caregivers of youth ranging from 6-18 years-old was conducted through an online survey panel company (i.e., Qualtrics). This approach allowed for efficient data collection from a target population at a reasonable cost (i.e., $12.50 per participant). Researchers are increasingly utilizing panels to conduct brief surveys and have found them to produce good quality data when validation methods are used (e.g., attention
checks; Abbey & Meloy, 2017; Lowry et al., 2016). Participants were recruited online by Qualtrics from May 21, 2020 through June 18, 2020 using a cross-sectional design. Panels include individuals who have registered to participate in research and have provided profile information that can be matched to study inclusion criteria. Respondents that potentially met inclusion criteria for the proposed study were contacted via email by Qualtrics. The email contained a link for the online survey and informed potential participants regarding the nature of the questions, required time, and compensation provided. Participants who were interested in engaging in the survey were asked to complete a screener that confirmed their eligibility. Those who were eligible were asked to read a letter of information describing the purpose of the study and provided consent to participate. Participants were then directed to a 20-min online survey to provide information on family demographics, youth externalizing and internalizing problems, barriers to care, and perceived need for and utilization of a variety of support services for their youth. Caregivers who had multiple children were asked to report on the youth with the most “emotional and behavioral problems”. The Utah State University Institutional Review Board approved the present study as exempt.

Inclusion criteria for the current study were (a) Latinx, (b) caregiver to at least one youth between the ages 6-18, (c) able to complete the survey in English, and (d) were living in the United States. Of those that attempted the survey \((n = 3,149)\) only a third \((n = 1,128)\) met inclusion criteria. Participants who did not provide consent to participate \((n = 17)\), provided poor quality data as identified by attention checks \((n = 235)\) or did not complete the entire survey \((n = 278)\), were excluded from the current study. The final sample consisted of 598 caregivers. See Table 1 for sample characteristics.

2.2. Measures
2.2.1. Sample Characteristics

Caregivers were asked to report their demographic information (i.e., age, binary gender, generational status in the United States, education, household income) and that of their youth (i.e., age, gender, insurance status). Caregivers reported on their skin tone and that of their child by selecting a shade from a figure with ten hands (Massey et al., 2003). Skin color ranged from the (1) lightest to (10) darkest. Caregivers also completed a single item asking whether shelter in place orders prevent them from seeking support services for their child during the coronavirus pandemic (i.e., yes [1] or no [0]).

2.2.2. Service Need and Utilization

The Caregiver Support Services Questionnaire (CSSQ) was created for the purpose of the current study to measure caregiver perceived need for and utilization of a variety of youth support services (Vázquez & Domenech Rodríguez, 2021). The decision was made to create the CSSQ due to limitations associated with existing service utilization measures such as (a) interview-based administration, (b) lack of assessment of perceived need, and (c) absence of questions regarding mentorship programs and parenting classes (Ascher et al., 1996; Jensen et al., 2004). The CSSQ is composed of 20 items querying caregiver perceived need for and utilization of a variety of support services in the last year (i.e., psychological counseling or therapy, mentorship programs, internet support groups, school professional, medical doctor, parenting classes, minister or faith healer, psychiatric hospitalization, crisis hotline, family or friends). Responses were yes (1) or no (0).

2.2.3. Barriers to Support Service Utilization

The current study used an adapted version of the Barriers to Treatment Questionnaire (BTQ) to assess caregiver reported barriers to accessing youth MHS (Marques et al., 2010). The
adapted Barriers to Treatment Questionnaire – Latina/o/x Caregiver (BTQ-LC; Vázquez et al., In press) is a 24-item questionnaire that asks caregivers to report barriers that influenced their decision to delay or avoid seeking support services for their child in the last year. Responses are on a 4-point scale: not at all (1), a little (2), moderately (3), very much (4), extremely (5). BTQ-LC items can be represented as a global score or as three subconstructs: (a) structural, (b) perceptions regarding mental health problems, and (c) perceptions regarding mental health services. While the three-factor solution has been found to pose a slightly better fit than the global scale, we decided to utilize the global score as this allowed us to broadly examine the impact of barriers on service utilization outcomes (Vázquez et al., In press). A mean global score was calculated for each participant with higher scores representing greater barriers to accessing youth MHS in the last year. The BTQ-LC global scale had excellent internal consistency within the current sample (α = .95). The global scale has also demonstrated construct validity through significant negative correlation with youth MHS utilization outcomes among Latinxs caregivers (i.e., psychological counseling, school counseling, medical doctors; Authors, 2021b). The BTQ was adapted as established barriers questionnaires do not assess important factors that impact Latinx families (i.e., stigma, shame, and fears of discrimination and deportation; Seid et al., 2009; Kazdin et al., 1997), focus exclusively on barriers to treatment retention (i.e., Kazdin et al., 1997), or include questions that are less relevant to children (e.g., agism scale; Pepin et al., 2009).

2.2.4. Youth Internalizing and Externalizing Problems

The Child Behavior Checklist is 113 item questionnaire that assess a broad variety of youth behavioral and emotional problems between ages 6-18 (CBCL; Achenbach, & Rescorla, 2001). Caregivers reported the frequency of their youth’s behavioral and emotional problems in
the last 6 months. Responses were: *not true* (0), *sometimes true* (1), or *often true* (2). CBCL items form two composite scales representing youth internalizing (e.g., depression, anxiety) and externalizing problems (e.g., aggression). Dichotomous variables were created to represent whether youths had clinically elevated internalizing and externalizing problems (i.e., T-score above 63; *yes* [1] or *no* [0]). We utilized dichotomous variables to represent clinical internalizing and externalizing problems on the CBCL as they are often used to indicate MHS need (Burns et al., 2004). Internal consistency for the CBCL was excellent within the current sample (i.e., internalizing $\alpha = .95$; externalizing $\alpha = .96$).

**2.2.5. Support Service Preferences**

Caregivers ranked 12 potential sources of support from (1) *most* to (12) *least preferable* for addressing youth emotional (e.g., anxiety, depression) and behavioral (e.g., defiance, delinquency, aggression, substance use) problems on two separate questions. Service preference questions included formats commonly included in service utilization measures and referenced in the literature (Ascher et al., 1996; Jensen et al., 2004; Ramos & Chavira, 2019). Services included psychological counseling or therapy *in-person*, psychological counseling or therapy *over video conferencing* (i.e., *telepsychology*), crisis hotlines, admission to psychiatric wards or unit of a hospital, mentorship programs, internet support groups, school professionals, family doctors or any other medical doctors, ministers or faith healers, parenting classes, social supports (i.e., family or friends), and smartphone applications.

**2.3. Analytic plan**

All analyses were performed in the R statistical environment (R Version 4.0.3; R Development Core Team, 2020), using the tidyverse (Wickham et al., 2019), psych (Revelle, 2019), and furniture (Barrett & Brignone, 2017) packages. Chi-square tests of independence
were used to determine whether service need and utilization were associated with specific youth psychopathology (i.e., clinical internalizing and externalizing problems). Problem-specific support service preferences were examined descriptively using heat maps to identify rankings most frequently associated with specific service formats. Binary logistic regression models were then used to determine whether youth and family characteristics, psychopathology, and barriers to care were associated with caregiver reported need for and utilization of each service format. Outcomes representing psychiatric hospitalization and crisis hotlines were excluded from these analyses due to low frequencies of reported need and utilization within the current sample.

3. Results

Caregivers reported that 22.4% (n = 134) of youths had clinical levels of externalizing and 30.6% (n = 183) internalizing problems. Of those youths with some level of clinical symptomatology (n = 211), there was significant comorbidity with 50.2% (n = 106) of caregivers reporting both clinical levels of externalizing and internalizing problems. Approximately 13.3% (n = 28) of youth were reported to have only clinical externalizing problems, while 36.5% (n = 77) of youth had only clinical internalizing problems. Caregivers on average, reported few barriers in seeking support services for their child within the last year (M = 1.9; SD = 0.8). However, one fourth of the sample were prevented from seeking services for their youth due to shelter in place orders associated with the coronavirus pandemic (25.1%; n = 150). Caregiver and youth dyads had similar skin tones on average. Caregiver skin tone was light on average (M = 2.92; SD = 1.36; Range 1-9) and was positively skewed (Skew = 0.92; Kurtosis = 1.07). Youth skin tone was also light on average (M = 2.80; SD = 1.33; Range 1-8) and was positively skewed (Skew = 0.90; Kurtosis = 0.90).
Caregivers most frequently endorsed needing support for their youth from medical doctors \( (n = 314; 52.5\%) \), school professionals \( (n = 291; 48.7\%) \), family or friends \( (n = 286; 47.8\%) \), psychological counseling or therapy \( (n = 271; 45.3\%) \), and parenting classes \( (n = 254; 42.5\%) \). Chi-square test of independence found that caregiver reported youth psychopathology was generally associated with support service need \( (p < .001) \). Specifically, higher rates of support service were needed across outcomes when youth had clinically elevated externalizing or internalizing problems. See Table 2 for rates of youth support service need by problem type. Caregivers endorsed medical doctors \( (n = 258; 43.1\%) \), family or friends \( (n = 244; 40.8\%) \), school professionals \( (n = 222; 37.1\%) \), and psychological counseling \( (n = 210; 35.1\%) \) as the most utilized sources of support for youths. Chi-square test of independence suggests that youth psychopathology was generally associated with support service utilization \( (p < .001) \). Caregivers utilized support services at higher rates when youth had clinically elevated externalizing or internalizing problems (see Table 2).

As the current sample was recruited during the coronavirus pandemic, we examined the extent to which shelter in place orders prevented caregivers from accessing youth support services to aid with the interpretation of our results using chi-square tests of independence. We found that coronavirus shelter in place orders were significantly \( (p < .001) \) associated with caregiver perceived need for services generally. Caregivers who were impeded from seeking youth MHS due to coronavirus shelter in place orders reported higher rates of service need from youth psychological counseling, mentorship programs, school professionals, medical doctors, parenting classes, and family or friends. Shelter in place orders were associated with lower rates of perceived need for crisis hotlines, psychiatric hospitalization, internet support groups, and minister or faith healers. Caregivers reported utilization of support services was also associated
with coronavirus shelter in place orders ($p < .001$), such that they reported higher rates of use relative to those who were not impeded (i.e., psychology counseling or therapy, school professional, medical doctors, family or friends). Some services had lower rates of utilization among those impeded by shelter in place orders (i.e., crisis hotlines, psychiatric hospitalization, mentorship programs, internet support groups, minister or faith healer, parenting classes). See supplemental Tables S1 for descriptive of study outcomes by coronavirus shelter in place orders.

3.1. Preferred Sources of Support

Psychological counseling or therapy was the most preferred source of support for youth internalizing problems within the current sample ($n = 305; 51\%$ ranked first). See supplemental Figure S1 for support service ranking for youth internalizing problems. School professionals, medical doctors, mentorship programs, family or friends were also ranked among the most preferred sources of support for youth internalizing problems. Crisis hotlines, smartphone applications, and ministers or faith healers were among the least preferred services for addressing youth internalizing problems. The least preferred source of support for addressing youth internalizing problems was psychiatric hospitalization ($n = 279; 47\%$ ranked twelfth). Caregivers also ranked psychological counseling as the most preferred method of addressing youth externalizing problems ($n = 291; 49\%$ ranked first). See supplemental Figure S2 for support service ranking for youth externalizing problems. Medical doctors, telepsychology, mentorship programs, and family or friends were also among the most preferred sources of support for youth externalizing problems. Crisis hotlines, smartphone applications, parenting classes, internet support groups, and minister or faith healers were frequently ranked as being among the least preferred services for addressing youth externalizing problems. The least preferred source of support for youth externalizing was psychiatric hospitalization ($n = 259; 43.3\%$ ranked twelfth).
3.2. Perceived Need Correlates

Findings from logistic regression models examining perceived need outcomes are summarized in Figure 1. Information regarding odds ratios, confidence intervals, and \( p \) values can be found in supplemental Table S2 for perceived need outcomes. Demographics (i.e., youth age, gender, and skin tone; household income) and barriers to services were not significantly associated with caregiver perceived need for psychological counseling. Caregivers who reported that their youth had clinically elevated externalizing problems had nearly three times higher odds of reporting needing psychological counseling relative to those who had subclinical problems (odds ratio [OR] = 2.85, \( p < .001 \)). Caregivers of youth with clinically elevated internalizing problems had nearly six times higher odds of reporting needing psychological counseling relative to their subclinical peers (OR = 5.86, \( p < .001 \)).

Caregivers were more likely to report a need for medical doctors for boys relative to girls (OR = 1.60, \( p = .009 \)). Household income was also associated with greater odds of reporting need for a medical doctor, with a unit increase in income being associated with a 21% increase in the odds that caregivers would report needing these services (OR = 1.21, \( p = .004 \)). Youth age, gender, skin tone, externalizing problems, and barriers to services were not significantly associated with caregiver reported need for medical services. Caregivers of youth with clinically elevated internalizing problems had two times higher odds of reporting needing help from a medical doctor (OR = 2.69, \( p < .001 \)).

A unit increase in household income was associated with an increase in the odds that caregivers would report needing support from a school professional (i.e., household income examined continuously; OR = 1.18, \( p = .004 \)). Caregivers who reported a need for school professionals did not significantly differ by youth age, gender, skin tone, and barriers to services.
Caregivers who reported that their youth had clinically elevated externalizing problems had two times higher odds of reporting needing help from a school professional relative to those who did not (OR = 2.61, \( p < .001 \)). Youth clinical level internalizing problems were also associated with a significant increase in the odds that a caregiver would report a need for services from a school professional (OR = 4.84, \( p < .001 \)).

Increases in age were associated with a significant decrease in the odds of caregivers reporting a need for parenting classes (OR = 0.92, \( p = .002 \)). As skin tone darkened, the odds of caregivers reporting a need for parent training increased (OR = 1.16, \( p = .04 \)). Increases in barriers to support services were associated with an increase in the odds that caregivers would report a need for parenting classes (OR = 1.50, \( p = .002 \)). Youth gender and household income were not significantly associated with perceived need for parenting classes. Youth with clinically elevated externalizing (OR = 2.19; \( p = .003 \)) or internalizing (OR = 2.77; \( p < .001 \)) problems had greater odds of caregivers reporting a need for parenting classes relative to those with subclinical problems.

Skin tone was significantly associated with perceived need for mentorship programs, such that darker skin was associated with greater odds of service need (OR = 1.16, \( p = .046 \)). Increases in household income were related to greater odds of caregivers reporting a need for mentorship programs (OR = 1.18, \( p = .006 \)). Perceived need for mentorship programs did not significantly differ by youth age, gender, or barriers to services. Caregivers of youth with clinically elevated externalizing (OR = 3.54, \( p < .001 \)) or internalizing (OR = 3.03, \( p < .001 \)) problems had higher odds of reporting needing mentorship programs relative to their subclinical peers.
Perceived need for ministers or faith healers was specifically related to youth externalizing problems. Caregivers of youth with clinically elevated externalizing problems had two times higher odds of reporting needing support for their child from a minister or faith healer relative to their subclinical peers (OR = 2.16, \( p = .009 \)). Youth age, gender, skin tone, household income, internalizing problems, and barriers to services were not significantly associated with caregiver perceived need for ministers or faith healers.

A unit increase in household income was associated with greater odds of caregivers reporting a need for internet support groups (OR = 1.26, \( p < .001 \)). Greater barriers to services were associated with an increase in the odds that caregivers would report a need for internet support groups (OR = 1.53, \( p = .006 \)). Youth age, gender, and skin tone was not significantly associated with caregiver perceived need for internet support groups. Caregivers of youth with clinically elevated externalizing (OR = 2.60, \( p < .001 \)) or internalizing (OR = 2.42, \( p < .001 \)) problems were more likely to report a need for internet support groups relative to those with subclinical problems.

Increases in age were associated with a decrease in the odds that caregivers would report needing support from family or friends (OR = 0.93, \( p = .005 \)). Caregivers were more likely to report needing support from family or friends for boys relative to girls (OR = 1.44, \( p = .04 \)). As skin tone darkened, the odds of perceiving a need for support from family and friends increased (OR = 1.15, \( p = .04 \)). Household income and barriers to services were not associated with caregiver perceived need for support from family or friends. Caregivers of youth with externalizing (OR = 1.79, \( p = .03 \)) or internalizing (OR = 2.79, \( p < .001 \)) problems were more likely to report a need for support from family or friends relative to subclinical youth.

### 3.3. Service Utilization Correlates
Findings from logistic regression models examining utilization outcomes are summarized in Figure 2. Information regarding odds ratios, confidence intervals, and $p$ values can be found in supplemental Table S3 for utilization outcomes. Increases in household income were associated with greater odds of caregivers utilizing youth psychological counseling (OR = 1.12, $p = .047$). Utilization of youth psychological counseling did not significantly differ by youth age, gender, skin tone, and barriers to services. Youth with clinical externalizing problems had nearly two times higher odds of utilizing psychological counseling relative to their subclinical peers (OR = 1.89, $p = .02$). The odds that caregivers reported utilizing psychological counseling increased by five times when their youth had clinically elevated internalizing problems relative to those that did not (OR = 5.11, $p < .001$).

Caregivers were more likely to report utilizing medical services for boys relative to girls (OR = 1.60, $p = .009$). A unit increase in household income was associated with greater odds of utilizing medical services (OR = 1.21, $p < .001$). Youth with clinical internalizing problems were more likely to utilize medical services relative to those who did not (OR = 2.69, $p < .001$). Medical services were not significantly associated with youth age, skin tone, barriers to services, and externalizing problems.

Increases in household income were associated with greater odds of utilizing school-based services (OR = 1.18, $p = .004$). Utilization of school professionals did not significantly differ by youth age, gender, skin tone, and barriers to services. Youth with clinically elevated externalizing (OR = 2.61, $p < .001$) or internalizing (OR = 4.84, $p < .001$) problems were more likely to utilize services from school professionals relative to those with subclinical problems.

Increases in household income were associated with greater odds of utilizing parenting classes (OR = 1.37, $p < .001$). Youth age, gender, skin tone, and barriers to services were not
significantly associated with the utilization of parenting classes. Caregivers of youth with clinical externalizing (OR = 3.17, \( p < .001 \)) or internalizing (OR = 2.56, \( p = .003 \)) problems were more likely to utilize parenting classes relative to those with subclinical problems.

Skin tone was significantly associated with utilization of mentorship programs, with darker skin being associated with greater odds of service use (OR = 1.20, \( p = .04 \)). Increases in household income were associated with greater odds of utilizing mentorship programs (OR = 1.25, \( p = .004 \)). Utilization of mentorship programs did not significantly differ by youth age, gender, and barriers to services. Youth with clinically elevated externalizing (OR = 2.81, \( p = .001 \)) or internalizing (OR = 5.13, \( p < .001 \)) problems were more likely to utilize mentorship programs relative to those with subclinical problems.

Increases in household income were associated with greater odds of utilizing minister or faith healers (OR = 1.20, \( p = .02 \)). Youth with clinical levels of externalizing problems were two times more likely to utilize support from ministers or faith healers relative to subclinical youth (OR = 2.23, \( p = .02 \)). Youth age, gender, skin tone, barriers to services, and clinical internalizing problems were not significantly associated with utilizing support from ministers or faith healers.

Caregivers were more likely to report utilizing internet support groups for boys relative to girls (OR = 2.23, \( p = .009 \)). A unit increase in household income was associated with greater odds of utilizing internet support groups (OR = 1.27, \( p = .003 \)). Youth age, skin tone, and barriers to services were not significantly associated with utilization of internet support groups. Youth with clinical externalizing (OR = 2.95, \( p = .001 \)) or internalizing (OR = 4.34, \( p < .001 \)) problems were more likely to utilize internet support groups relative to their subclinical peers.

Increases in age were associated with lower odds of utilizing support from family or friends (OR = 0.93, \( p = .007 \)). Youth gender skin tone, household income, and barriers to care
were not significantly associated to the utilization of support from family or friends. Caregivers of youth with clinically elevated externalizing (OR = 1.96, \( p = .008 \)) or internalizing (OR = 2.06, \( p = .002 \)) problems were more likely to report utilizing support from family or friends relative to those with subclinical problems.

4. Discussion

Our understanding of service utilization patterns thus far has increased our awareness of racial/ethnic groups utilization patterns (Gudiño et al., 2009; Gudiño et al., 2012) and the reasons why certain groups such as Latinx do not access traditional MHS (Kapke & Gerdes, 2016). This study expands on prior research by focusing on an understudied racial/ethnic subpopulation with significant within group variability and considers the critical intersection between client characteristics, service utilization patterns, and preferences in terms of treatment. Our findings provide information on service utilization patterns and preferences among Latinx caregivers that may clarify important targets for eliminating mental health disparities within this group. While Latinx caregivers ranked psychological counseling as their most preferred method for addressing youth psychopathology (i.e., externalizing and internalizing), many youths with clinically elevated psychopathology did not access these services. Caregivers also reported needing and utilizing a wide range of support services to address youth psychopathology. These findings signal a need to improve access to youth psychological counseling among Latinxs. Results also highlight potential opportunities to provide evidence-based interventions through a broader array of service formats that Latinx caregivers report needing and utilizing.

Caregivers in our sample most frequently reported needing support from medical doctors, school professionals, family or friends, psychological counseling, and parenting classes. Caregivers primarily utilized medical doctors, family or friends, school professionals, and
psychological counseling. The odds of utilizing services were largely increased by both youth problem types (i.e., clinical externalizing and internalizing problems). Building on prior work (Gudiño et al., 2012; Vázquez & Villodas, 2019), we did find problem-specific service utilization patterns among Latinx caregivers. Caregivers were more likely to perceive a need for and utilize medical services for their youth when they had clinically elevated internalizing problems but not externalizing. We also found that perceived need and utilization of ministers or faith healers were specifically associated with externalizing problems. These findings highlight the complexity of service utilization among Latinx caregivers.

The rates by which specific support services are sought could reflect accessibility rather than client preference. When we explored specific caregiver preferences as opposed to utilization rates, we found that Latinx caregivers generally preferred psychological counseling to address youth psychopathology relative to other formal and informal sources of support. Medical doctors, mentorship programs, and family or friends were also ranked as being preferred sources of support for addressing youth psychopathology. Least preferred services across problem types were psychiatric hospitalization, crisis hotlines, smart phone applications, and ministers and faith healers. Our findings help elucidate service utilization in terms of preferred treatments, rather than accessible ones, calling for a more nuanced approach to service provision.

Contrary to prior findings examining between group differences in service utilization, increases in age were not associated with lower odds of utilizing psychological counseling within the current sample (Gudiño et al., 2009). Our findings suggest that Latinx caregivers may perceive a need for support from parenting classes and family or friends for younger youths. However, age was only associated with utilization of support from family or friends suggesting that caregivers may utilize parenting classes independent of the youth’s age. Higher household
income was associated with higher rates of caregiver reported need for specific services (i.e., medical doctors, school professionals, mentorship programs, internet support groups) and generally corresponded with greater odd of service utilization with the exception of support from family or friends. These findings potentially speak to the influence of household income on caregivers’ decisions and ability to access a wide variety of support services for youths.

Prior research suggest that Black caregivers may view mentorship programs as a culturally congruent service format (Vázquez & Villodas, 2019). Our findings suggest that caregivers of darker skinned Latinx youth may perceive a greater need for mentorship programs relative to their lighter skinned counterparts. Darker skin tone was also associated with greater odds of Latinx caregivers reporting a need for support from parenting classes and family or friends. However, skin tone was only associated with utilization of mentorship programs. Research is needed to understand contextual stressors that may explain skin tone related differences in youth service need and utilization among Latinx caregivers.

While caregivers within the current sample reported few barriers to accessing support services, increases in barriers to care were associated with greater odds of caregivers reporting a need for parenting classes and internet support groups. It is possible that these intervention types may be viewed as more accessible and less stigmatizing service formats among families experiencing barriers to accessing traditional youth MHS. However, barriers to care were not significantly associated with service utilization outcomes within the current sample after accounting for other factors. This may be due to the demographic characteristics of the current sample, which consisted of high income and light skinned Latinxs that may experience fewer barriers to care (Vázquez et al., 2021).

5. Implications
While our findings suggest that psychological counseling was the most preferred source of support for addressing youth psychopathology, many youths with clinically elevated psychopathology did not access these services. Youth counseling service need and utilization was not significant related to barriers examined within the present study. These findings suggest a need to identify additional barriers that may explain this disparity (e.g., family supports seeking formal services, childcare; Kapke & Gerdes, 2016). Despite a marked preference for psychological counseling, caregivers reported needing and utilizing a wide array of services. As caregivers frequently reported needing and utilizing medical services for their child, it is possible that integrating youth psychological counseling into primary care setting may improve the likelihood that Latinx families encounter and utilize these services (Stiles et al., 2019).

Our findings also suggest that Latinx caregivers frequently needed and utilized school counseling. Investing in school-based psychological services could increase the chances that Latinx youth access evidence-based interventions (Bains & Diallo, 2016). Evidence-based parenting programs are also widely disseminated (Gardner et al., 2016). However, our findings suggest that Latinx caregivers may use these programs to address psychopathology beyond youth externalizing problems that are not commonly addressed by this intervention format (i.e., internalizing problems). Clinicians working with Latinx caregivers may consider integrating components targeting internalizing problems into parenting interventions. However, it should be noted that while Latinx caregivers reported needing parenting classes, this service format was among those that were less preferred avenues for intervention (i.e., parenting classes, ministers and faith healers, smart phone applications, psychiatric hospitalization). Within the current sample, family or friends were also a frequently needed, used, and preferred source of support. Strengthening the support that Latinx caregiver receive from their social networks could assist in
directing these families towards formal MHS and could improve treatment outcomes (Ramos et al., 2021; Villatoro et al., 2014). Lastly, our findings identified mentorship programs as a preferred source of support and potential avenue for introducing Latinx youth to components of evidence-based interventions used to address psychopathology (Cavell et al., 2021). Prior research has found that paraprofessionals, like those found in mentorship programs, can be trained to effectively deliver evidence-based intervention and prevention services in less formal settings (Lakind et al., 2019).

**Limitations**

Findings from the present study should be interpreted in light of several limitations. Data used in the current study were collected using a cross-sectional design. Thus, temporal precedent between predictors and outcomes cannot be established. The current study did not measure caregiver acculturation and only included participants that could complete the survey in English. It is possible that participants within the current sample preferred more formal interventions due to higher levels of acculturation (see generational status and language preferences in sample demographics; Galvan & Gudiño, 2021). Future research should assess service utilization patterns and preferences within the context of caregiver acculturation and enculturation in a multilingual sample. Due to low frequency of endorsement, the current study could not examine correlates of psychiatric hospitalization and crisis hotlines. Future research may examine correlates of these services using a sample with a higher severity of youth psychological problems. The current sample had a high degree of comorbidity between youth clinical internalizing and externalizing problems. Future research should confirm our findings using a sample of youth with more distinct patterns of clinical psychopathology. The current sample also consisted of high income and light skinned Latinxs that may be more likely to utilize formal
youth MHS. Research is needed to confirm our findings among Latinxs with greater economic disadvantage, limited English proficiency, and darker skin who may experience greater barriers to accessing youth MHS.

Questions assessing service need and utilization were within the timeframe of a year prior to the survey. As the survey was completed nearly three months after the first coronavirus pandemic related shelter in place order, caregivers reported need for and ability to utilize services may have been impacted to an extent (i.e., mid-March 2020). Our analysis does suggest that coronavirus pandemic related shelter in place orders appeared to differently impact caregiver perceived need for and utilization of various services. Research is needed to confirm our findings once coronavirus related restrictions of MHS have been lifted.

6. Conclusions

Latinx caregivers utilize a wide array of services to address youth psychopathology, yet largely prefer psychological counseling relative to other sources of support. Our findings highlight a need to improve access to youth psychological counseling, while also exploring opportunities to integrate services into formats that Latinx caregivers report needing and utilizing in response to youth psychopathology (e.g., primary care settings, schools, mentorship programs). Utilizing a parallel strategy that increases access to psychological counseling services, while also adopting greater flexibility and creativity in the dissemination of evidence-based interventions may increase Latinx youths’ exposure to effective treatments through various sources of support, many of which they may already use. Further research is needed to understand the influence of caregiver culture (i.e., values, acculturation, enculturation) on youth MHS utilization patterns and preferences among Latinxs.
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### Sample Characteristics

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<th>Sample Characteristic</th>
<th>Total</th>
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<tbody>
<tr>
<td>Mean/count (SD/%)</td>
<td>(n = 598)</td>
</tr>
<tr>
<td><strong>Caregiver</strong></td>
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</tr>
<tr>
<td>Age</td>
<td>38.5 (9.1)</td>
</tr>
<tr>
<td>Skin tone</td>
<td>2.9 (1.4)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>178 (29.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>420 (70.2%)</td>
</tr>
<tr>
<td>Latinx generation</td>
<td></td>
</tr>
<tr>
<td>1st generation</td>
<td>145 (24.2%)</td>
</tr>
<tr>
<td>2nd generation</td>
<td>283 (47.3%)</td>
</tr>
<tr>
<td>3rd generation</td>
<td>96 (16.1%)</td>
</tr>
<tr>
<td>4th generation or higher</td>
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</tr>
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</tr>
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<td>198 (33.1%)</td>
</tr>
<tr>
<td>Post-secondary ^1</td>
<td>400 (66.9%)</td>
</tr>
<tr>
<td>Household income</td>
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<tr>
<td>Below 14,999</td>
<td>36 (6.0%)</td>
</tr>
<tr>
<td>$15,000-$29,999</td>
<td>74 (12.4%)</td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>129 (21.6%)</td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>128 (21.4%)</td>
</tr>
<tr>
<td>$75,000-$99,999</td>
<td>90 (15.1%)</td>
</tr>
<tr>
<td>$100,000-$149,999</td>
<td>98 (16.4%)</td>
</tr>
<tr>
<td>$150,000-$199,999</td>
<td>25 (4.2%)</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>18 (3.0%)</td>
</tr>
<tr>
<td>Barriers to care</td>
<td>1.9 (0.8)</td>
</tr>
<tr>
<td>Shelter in place order impeded service utilization</td>
<td>150 (25.1%)</td>
</tr>
<tr>
<td><strong>Child</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>11.9 (3.4)</td>
</tr>
<tr>
<td>Skin tone</td>
<td>2.8 (1.3)</td>
</tr>
<tr>
<td>Sex</td>
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</tr>
<tr>
<td>Male</td>
<td>328 (54.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>270 (45.2%)</td>
</tr>
<tr>
<td>Clinical externalizing</td>
<td>134 (22.4%)</td>
</tr>
<tr>
<td>Clinical internalizing</td>
<td>183 (30.6%)</td>
</tr>
</tbody>
</table>

Note: ^1 includes vocational certificate, associates, bachelors, masters, and doctorate degrees.
Table 2

Perceived Need for and Utilization of Sources of Support by Youth Psychopathology in The Last Year

<table>
<thead>
<tr>
<th>Support Services</th>
<th>Total</th>
<th>Externalizing</th>
<th>Internalizing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 598</td>
<td>n = 134</td>
<td>n = 464</td>
</tr>
<tr>
<td><strong>Perceived Need</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological counseling</td>
<td>271 (45.3%)</td>
<td>109 (81.3%)</td>
<td>162 (34.9%)</td>
</tr>
<tr>
<td>Parenting classes</td>
<td>254 (42.5%)</td>
<td>99 (73.9%)</td>
<td>155 (33.4%)</td>
</tr>
<tr>
<td>Mentorship program</td>
<td>169 (28.3%)</td>
<td>85 (63.4%)</td>
<td>84 (18.1%)</td>
</tr>
<tr>
<td>Internet support groups</td>
<td>127 (21.2%)</td>
<td>66 (49.3%)</td>
<td>61 (13.1%)</td>
</tr>
<tr>
<td>School professional</td>
<td>291 (48.7%)</td>
<td>104 (77.6%)</td>
<td>187 (40.3%)</td>
</tr>
<tr>
<td>Medical doctor</td>
<td>314 (52.5%)</td>
<td>98 (73.1%)</td>
<td>216 (46.6%)</td>
</tr>
<tr>
<td>Minister or faith healer</td>
<td>111 (18.6%)</td>
<td>45 (33.6%)</td>
<td>66 (14.2%)</td>
</tr>
<tr>
<td>Psychiatric hospitalization</td>
<td>42 (7%)</td>
<td>31 (23.1%)</td>
<td>11 (2.4%)</td>
</tr>
<tr>
<td>Crisis hotline</td>
<td>55 (9.2%)</td>
<td>37 (27.6%)</td>
<td>18 (3.9%)</td>
</tr>
<tr>
<td>Family or friends</td>
<td>286 (47.8%)</td>
<td>99 (73.9%)</td>
<td>187 (40.3%)</td>
</tr>
<tr>
<td><strong>Utilized</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological counseling</td>
<td>210 (35.1%)</td>
<td>89 (66.4%)</td>
<td>121 (26.1%)</td>
</tr>
<tr>
<td>Parenting classes</td>
<td>96 (16.1%)</td>
<td>55 (41%)</td>
<td>41 (8.8%)</td>
</tr>
<tr>
<td>Mentorship program</td>
<td>88 (14.7%)</td>
<td>54 (40.3%)</td>
<td>34 (7.3%)</td>
</tr>
<tr>
<td>Internet support groups</td>
<td>77 (12.9%)</td>
<td>49 (36.6%)</td>
<td>28 (6%)</td>
</tr>
<tr>
<td>School professional</td>
<td>222 (37.1%)</td>
<td>91 (67.9%)</td>
<td>131 (28.2%)</td>
</tr>
<tr>
<td>Medical doctor</td>
<td>258 (43.1%)</td>
<td>88 (65.7%)</td>
<td>170 (36.6%)</td>
</tr>
<tr>
<td>Minister or faith healer</td>
<td>66 (11%)</td>
<td>32 (23.9%)</td>
<td>34 (7.3%)</td>
</tr>
<tr>
<td>Psychiatric hospitalization</td>
<td>29 (4.8%)</td>
<td>28 (20.9%)</td>
<td>5 (1.1%)</td>
</tr>
<tr>
<td>Crisis hotline</td>
<td>33 (5.5%)</td>
<td>22 (16.4%)</td>
<td>7 (1.5%)</td>
</tr>
<tr>
<td>Family or friends</td>
<td>244 (40.8%)</td>
<td>85 (63.4%)</td>
<td>159 (34.3%)</td>
</tr>
</tbody>
</table>

*Note:* Precents are displayed within column. Chi-square test of independence suggest that support service need and utilization significantly varied by clinical level youth problems (i.e., externalizing, internalizing; \(p < .001\)) across all sources.
Binary Logistic Regression Models for Perceived Need Outcomes ($N = 598$)

Note: Predictors whose confidence bands cross the 1.0 odds ratio line are not statistically significant ($p > .05$). Predictors were analyzed as continuous variables unless otherwise specified. Boys = boys relative to girls. CBCL externalizing and internalizing = youth clinical problems relative to subclinical problems.
**Figure 2**

*Binary Logistic Regression Models for Utilization Outcomes (N = 598)*

Note: Predictors whose confidence bands cross the 1.0 odds ratio line are not statistically significant ($p > .05$). Predictors were analyzed as continuous variables unless otherwise specified. Boys = boys relative to girls. CBCL externalizing and internalizing = youth clinical problems relative to subclinical problems.