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# Mental Health Service Use for Children In Contact With Child Welfare: Racial Disparities Depend on Problem Type

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## Abstract

**Objective—**To examine racial disparities in mental health service use by problem type (internalizing vs. externalizing) for youths in contact with the child welfare system.

**Methods—**Participants included 1,693 non-Hispanic white, African American, and Hispanic youths (ages 4-14) from the National Survey of Child and Adolescent Well-Being, a national probability study of youths who were the subject of investigations of maltreatment by child welfare agencies. Mental health need, assessed at baseline, was considered present if the youth had internalizing/externalizing scores in the clinical range on either the Child Behavior Checklist or Youth Self-Report. Outpatient mental health service use in the subsequent year was assessed prospectively.

**Results—**Children who were removed from the home and those investigated for abuse (vs. neglect) were more likely to receive services in the year following the child welfare investigation. Overall, African American youths were less likely to receive mental health services relative to non-Hispanic white youths. However, race moderated the association between externalizing need and service use such that African Americans were more likely to receive services when externalizing need was present (26% vs. 4%) compared to non-Hispanic white youths (30% vs. 14%). Race/ethnicity did not moderate the association between youth internalizing need and service use, but internalizing need was only associated with increased probability of service use for non-Hispanic white youths.

**Conclusions—**Examinations of overall racial disparities in service use may obscure important problem-specific disparities. Additional research is needed to identify factors that lead to disparities and to develop strategies for reducing them.

### Keywords

Racial disparities; unmet need; child welfare system; internalizing/externalizing

An estimated 80% of youths with mental health needs go untreated (1). Racial disparities in mental health service use have been well-documented, with minorities being more likely to have unmet need relative to non-Hispanic whites. For example, in a nationally representative sample of American families Hispanic children were more than twice as likely to have unmet mental health need relative to non-Hispanic white children (1). Among children in

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contact with public sectors of care, African American and Asian American children were about one-half as likely to use mental health services as non-Hispanic white children, even after accounting for demographic variables and mental health need (2).

While overall racial disparities are concerning, more recent research suggests that service use pattern may vary by type of presenting problem. Youths with externalizing problems (e.g., disruptive behavior) are more likely to receive mental health services relative to youths with internalizing problems (e.g., depression or anxiety) (3). In fact, racial disparities appear to be less pronounced for externalizing need, with African American (46%) and Hispanic youths (48%) having service use rates similar to non-Hispanic white (55%) youths (4). Controlling for demographic and need variables, African American youths were more likely than non-Hispanic white youths to receive specialty mental health services in response to externalizing symptom severity (4). Racial disparities appear to be more pronounced when considering internalizing need, with non-Hispanic white youths with having higher rates of service use (72%) compared to Hispanic youths (41%) and rates for African Americans (56%) falling between those of their counterparts (4).

Youths who come into contact with the child welfare system are at high risk for internalizing and externalizing problems, with nearly 50% having clinically significant emotional and behavioral problems (5). Fortunately, contact with the child welfare system appears to facilitate access to mental health services, particularly in the initial months following a maltreatment investigation (6). However, access to services is determined by a host of individual, family, and systemic factors. For example, children referred for allegations of abuse (vs. neglect) and children who are taken out of the home (vs. those who remain in the home) are more likely to receive mental health services (5). Prior research has found that African American youths (relative to non-Hispanic whites) who come into contact with the child welfare system continue to be less than one-half as likely to receive mental health services, even after accounting for demographics, maltreatment history, and mental health need (5). Leslie and colleagues (7) found that racial disparities in service use appear to be most pronounced at lower levels of clinical need when children remain in the home, but that disparities persist across the range of severity for children placed in foster care.

Mental health service use is likely influenced by multiple factors that converge to create problem-specific disparities in unmet need. Youths rarely self-refer for treatment and, as a result, service use is largely dependent on the ability of adult gatekeepers of mental health services to identify youths' needs and link them to services. Caregivers play a prominent role in this process, but barriers such as heightened concerns about stigma, lack of access to linguistically appropriate services, and culturally-influenced perceptions of mental health problems or the need for services may set a relatively high threshold for seeking services (8-10).

Disparities in mental health services may also be due to system-level factors that actually promote receipt of services for ethnic minority youths. Ethnic minority youths are overrepresented in the child welfare and juvenile justice systems (11, 12), where externalizing problems are closely scrutinized. Disruptive behavior problems are important for the child welfare system given that they are robust predictors of placement instability (13) and represent highly visible indicators of need relative to internalizing problems. It is also important to consider that institutional bias may impact identification of needs in specific ways. For example, some studies suggest that teachers have a greater tendency to perceive externalizing problems in African American youths (14-16) and African American youths are more likely to receive disciplinary action for disruptive behavior in school relative to non-Hispanic white youths (17, 18). In contrast to caregivers, teachers of African American students perceive more externalizing problems (19). Similarly, results from a

large sample of youths in care suggest that even after controlling for demographic factors and impairment, African American youths are more likely to be diagnosed with a disruptive behavior disorder relative to non-Hispanic white youths, though no ethnic differences were noted in parent-rated externalizing problems or clinician-rated impairment (20). Given that externalizing problems are more distressing to others and are more easily identified by adult gatekeepers relative to more subtle internalizing problems (21, 22), there may be a particularly high threshold for identifying internalizing mental health needs in ethnic minority youths.

The current study examines whether race/ethnicity moderates the association between type of mental health need (internalizing vs. externalizing) and mental health service utilization for youths in contact with the child welfare system. We extend prior research by specifically focusing on racial disparities by problem type and by examining service use prospectively for one year. We hypothesize that 1) ethnic minority youths are more likely to receive services for externalizing problems relative to non-Hispanic white youths and that 2) ethnic minority youths are less likely to receive mental health services for internalizing problems relative to non- Hispanic white youths.

## Method

### Participants

The National Survey of Child and Adolescent Well-Being (NSCAW; N=5,501) is a national probability study of children who were subjects of reports of maltreatment to child welfare agencies. For the current study, participants (N=1, 693) were non-Hispanic white (n=910), African American (n=485), and Hispanic youths (n=298) who remained with the same caregiver for the first 12 months following the close of the child welfare investigation and who were age 4-14 (mean age 8.9±3.2) at the initial interview. The median annual household income for families was $20,000-$25,000.

### Procedure

Initial interviews were conducted 2-6 months after the close of the child welfare investigation. Demographics, alleged type of maltreatment, placement type, and caregiver report of mental health need were assessed during the initial interview. Youths age 11 or older also provided self-reports of mental health need at this time. Service use was assessed prospectively via caregiver interviews conducted 12 months after the close of the investigation.

Caregivers and caseworkers provided consent for their participation while signed consent for the child's participation was obtained from the person who had the legal authority to do so. Children age seven and older also provided assent. The NSCAW study received approval from the Research Triangle Institute's Institutional Review Board (IRB) as well as additional approvals from IRBs from four states and five additional NSCAW consortium institutions. The use of secondary data for the current study was approved by the (institution removed for blinding) IRB.

### Measures

Demographic variables included child age, sex, and family annual household income. The alleged type of maltreatment resulting in the investigation was obtained from child welfare agency workers utilizing a modified version of the Maltreatment Classification Scale (23). For the current study, maltreatment type was coded into active abuse (physical, sexual, and emotional abuse) vs. all forms of neglect. Placement type, also obtained from agency workers, was coded as being out of home (including foster care and group home/residential)

or remaining in the home. Mental health need was defined as having an internalizing and/or externalizing broadband *T*-score ≥ 64 on either the Child Behavior Checklist (CBCL; 24) completed by caregivers or the Youth Self-Report (YSR; 24) completed by youths age 11 and older. Lastly, service use was assessed utilizing an adapted version of the Child and Adolescent Services Assessment (CASA; 25) completed by caregivers. Outpatient mental health service use was defined as any use of clinic-based specialty mental health services, private practice specialists, in-home mental health services, and therapeutic nursery/day treatment services in the 12 months following the close of the child welfare investigation.

### Data Analysis

STATA 12 (26) was used to account for the complex survey design. All analyses utilize sampling weights to yield national estimates for the population of children involved with the child welfare system. Chi-square tests and ANOVA were used to examine potential racial/ethnic differences across study variables. Hierarchical logistic regression models were used to predict outpatient mental health service use. In the first step of each model, we entered the following independent predictors: Youth age, sex, household income, placement type, race/ethnicity, alleged type of maltreatment, internalizing need, and externalizing need. To examine whether race/ethnicity moderated the association between mental health need and service use, interaction terms were added to the model in the second step.

## Results

Descriptive statistics for study variables are presented in Table 1. African American and Hispanic youths had lower median annual household incomes relative to non-Hispanic white youths. Relative to African Americans, Hispanic youths were younger. Finally, African American youths were significantly less likely to receive mental health services relative to non-Hispanic white youths. All other study variables did not differ based on youths' race/ethnicity (see Table 1).

Results from logistic regression analyses predicting mental health service use are presented in Table 2. In Step 1, children placed out of home and children investigated due to allegations of abuse (vs. neglect) were more likely to receive mental health services in the 12 months following initial contact with the child welfare system. Both internalizing and externalizing mental health need predicted service use in the overall sample. These multivariate analyses also suggested that African American youths continued to be less likely than non-Hispanic white youths to receive mental health services, even after controlling for demographics, maltreatment history, and mental health need.

In Step 2, we tested whether race moderated the association between type of mental health need and service use. As seen in Table 2, race did not significantly moderate the association between internalizing need and service use. Figure 1 presents the predicted probability of service use as a function of youths' race and the presence vs. absence of internalizing need, while controlling for all other predictors. Although non-Hispanic white youths were the only group that had higher rates of service use when internalizing need was present versus absent (34% vs. 15%) when compared to African American (13% vs. 6%) and Hispanic (22% vs. 11%) youths, race was not a statistically significant moderator of these associations.

Consistent with study hypotheses, race did moderate the association between externalizing need and service use for African American youths relative to white youths (B=1.31, SE=.65, $p<.05$). Figure 2 presents the predicted probability of service use as a function of youths' race and the presence vs. absence of externalizing need. African American youths with externalizing need had a much greater probability of receiving services (26%) relative to African American youths without externalizing need (4%). This discrepancy in predicted

service use was smaller for non-Hispanic white youths with and without externalizing mental health need (30% vs. 14%, respectively). Like African American youths, Hispanic youths were likely to receive services when they had externalizing need relative to when they did not (34% vs. 8%, respectively), but this pattern did not differ significantly from that of non-Hispanic white youths (B=.94, SE=.75, *p*=*ns*).

## Discussion

We examined racial/ethnic disparities in mental health service use by problem type in a national probability sample of children in contact with the child welfare system. Notably, we found no racial differences in rates of internalizing or externalizing need. Consistent with previous cross-sectional research using these data (5), African American youths were less likely to receive services relative to non-Hispanic white youths one year following contact with the child welfare system. However, when examining racial disparities by problem type, we found that African American youths were actually quite likely to receive mental health services in response to externalizing need. Although contrary to the typical finding of higher rates of unmet need for racial/ethnic minorities, this research is consistent with recent work aimed at examining problem-specific disparities (4, 27). Conversely, race/ethnicity did not moderate the association between internalizing need and service use, but non-Hispanic white youths were the only group where the presence of internalizing need was associated with a greater likelihood of service use relative to when internalizing need was absent.

Problem-specific disparities in service use likely result from multiple factors. First, practical barriers for racial/ethnic minority families may set a high threshold for accessing mental health services (8-10). Although contact with the child welfare system increases access to publicly-funded health insurance, thus mitigating one important barrier, additional barriers remain (e.g., access to mental health services in the community). Second, externalizing problems are more distressing to adults, may be easier for others to detect, and are considered more problematic relative to internalizing problems (3, 21, 22). Cultural factors may also impact service use patterns in important ways. For example, previous research suggests that relative to non-Hispanic white parents, racial/ethnic minority parents are less likely to identify child mental health problems (28) or may hold different explanatory models about children's problems (10) or beliefs about how to address such problems (29, 30). Furthermore, culture may also impact parental perceptions of child problem severity, thus influencing caregiver thresholds for distress (31). Within ethnic minority families, externalizing problems may be in high contrast to cultural values emphasizing respect, familism, and obedience whereas internalizing behaviors may be more consonant with such values (4, 27).

System-level factors in child welfare also likely impact problem-specific disparities. There is a robust finding that ethnic minority children are disproportionately represented in the child welfare system, despite no evidence of differential need for protection (12, 32, 33). It remains unclear whether institutional bias in child welfare leads to increased scrutiny of disruptive behavior in ethnic minority children. Similar to research in schools (e.g., 14-16), it is possible that adult gatekeepers of services (e.g., case managers, social workers, & foster parents) may scrutinize the behavior of ethnic minority youth more closely and may perceive more externalizing problems. Such factors may explain why African American youths are more likely to be diagnosed with a disruptive behavior problem relative to non-Hispanic white youths, even when parent-rated externalizing problems and clinician-rated impairment do not suggest ethnic differences (20). It should also be noted that disruptive behavior problems are of critical importance to child welfare, given that they are robust predictors of youths' placement instability (13). Heightened visibility and distress associated with externalizing problems may thus facilitate recognition of externalizing problems by

adult gatekeepers of mental health services. Untreated internalizing problems, however, can also have lasting negative consequences (34-37).

The Institute of Medicine (IOM) (38) notes that a disparity exists when there are differences in the treatment provided to individuals of different races/ethnicities when that discrepancy is not warranted by variation in the health conditions or treatment preferences of the group. A presumed injustice is thus central to the definition of a disparity. In the current study, we find that after accounting for socioeconomic status and need, African American youths continue to have a lower likelihood of receiving services compared to non-Hispanic whites. This would certainly fall within the IOM's definition of a disparity. However, our central focus on disparities by problem type also highlights a different form of disparity. African American children in our study saw a seven-fold increase in the probability of receiving mental health services when they had externalizing need. In essence, the child welfare service system appears to be quite responsive to the disruptive behavior of African American youths – even more so than for non-Hispanic white children. Furthermore, the probability of receiving services is about 30% for all youths with externalizing problems, regardless of race/ethnicity. We did not find evidence of disparities by problem type for internalizing need. A sense of injustice may linger nonetheless when we consider that African American youths are very likely to receive services (more so than white youth) in response to "bad" behavior. The goal must be to ensure that need is a strong predictor of service use regardless of race/ethnicity and type of mental health need.

Our results should be viewed in the context of study limitations. For example, while we operationalized need based on caregiver- and youth-reported symptoms, the reason for seeking services is not known. While disparities identified in our research are of high public health importance, additional research is needed to elucidate the specific processes that produced them. Understanding the factors that impact gatekeeper perceptions of need based on child race/ethnicity and problem type may be particularly illuminating. Furthermore, we defined service use as any contact with an outpatient mental health provider and thus are unable to address the quality and effectiveness of services received. Future research should examine whether quality of care differs by problem type. Lastly, although constraining our analysis to children who remain with the same caregiver for the study period allows us to examine the potential influence of caregiver-rated problems on subsequent service use, these results may not be generalizable to youths experiencing more frequent changes in placement.

## Conclusions

The current study examines problem-specific disparities in mental health service use prospectively in a nationally representative sample of youth in contact with the child welfare system, providing an assessment of the ability to identify and meet the needs of vulnerable youths. Results suggest that examining overall racial disparities in unmet need obscures problem-specific disparities. Although identifying disparities is an important initial step, additional research is needed to elucidate factors that drive disparities. Because children in contact with the child welfare system are at high-risk of emotional/behavioral problems and a primary mission of the system is to ensure the wellbeing of children, it is imperative that we continue improving our ability to meet the needs of these youths. Routine evidence-based screening coupled with promotion of mental health education for biological parents, foster parents, and child welfare staff may prove to be useful interventions for reducing disparities in service use. By developing effective practices for reducing disparities, we may be better able to identify and meet the safety and mental health needs of all vulnerable children who come into contact with the child welfare system in a more equitable manner.

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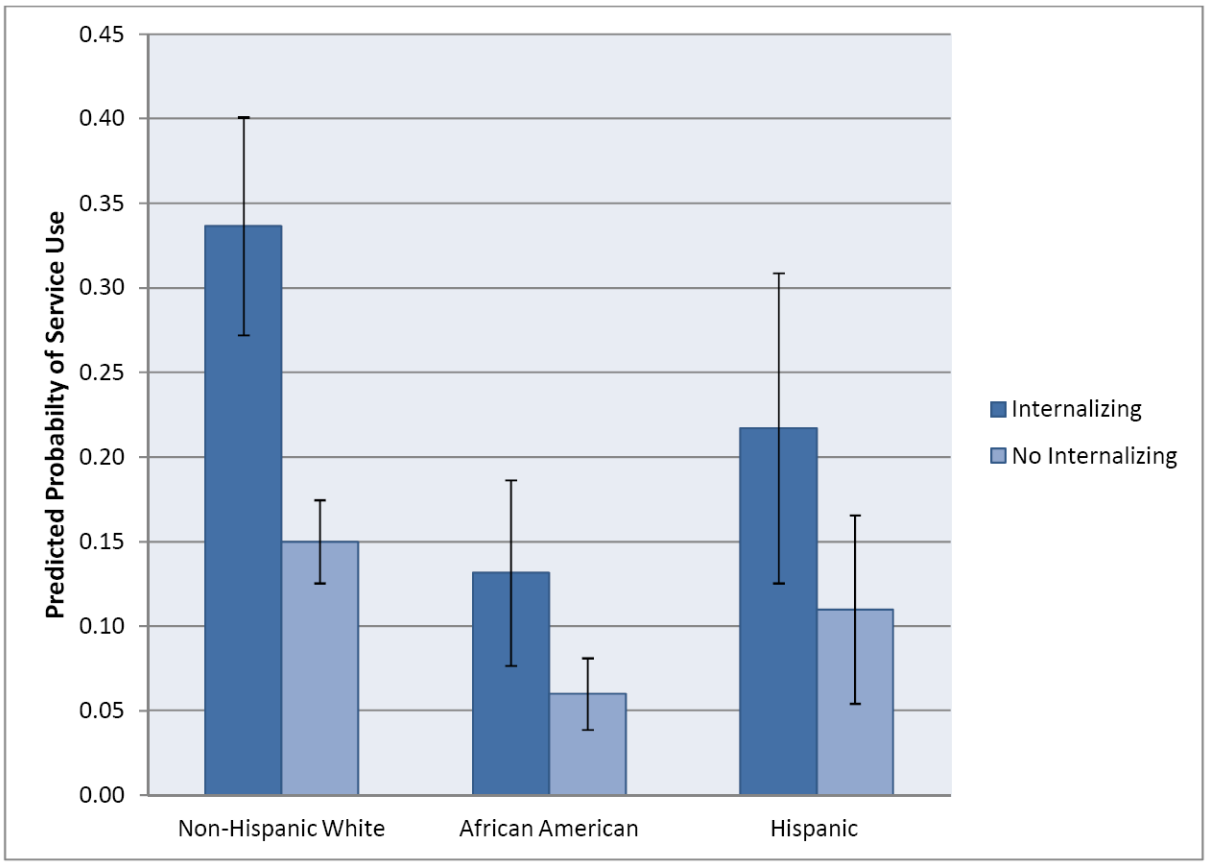


**Figure 1.**
Predicted Probability of Mental Health Service Use as a Function of Internalizing Need and Race/Ethnicity. Probabilities are calculated controlling for all other model predictors.

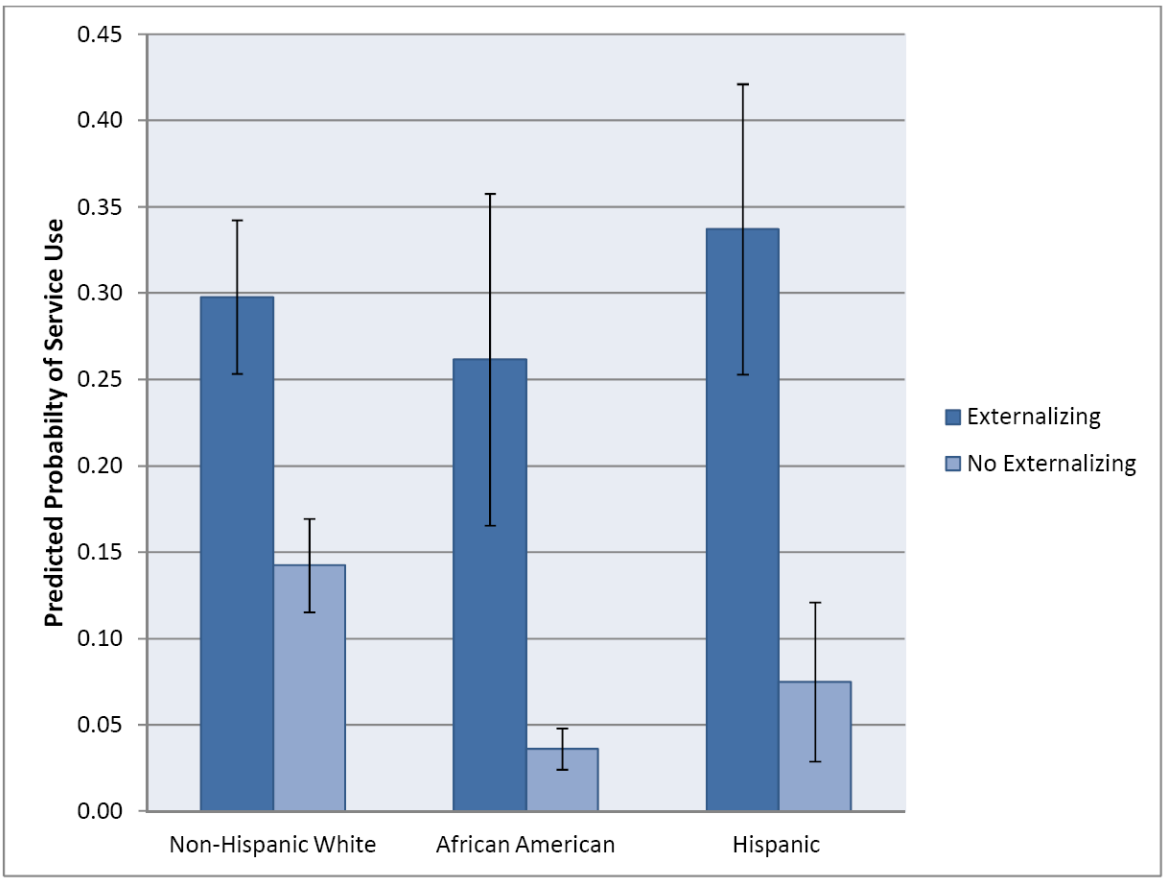


**Figure 2.**
Predicted Probability of Mental Health Service Use as a Function of Externalizing Need and Race/Ethnicity. Probabilities are calculated controlling for all other model predictors.

**Table 1**

Descriptive Statistics for Study Variables by Youth Race/Ethnicity

| | Overall Sample (N=1693) | | | Non-Hispanic White (N=910) | | | African American (N=485) | | | Hispanic American (N=298) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Variable** | **N** | **%** | **95% CI** | **N** | **%** | **95% CI** | **N** | **%** | **95% CI** | **N** | **%** | **95% CI** |
| Male (vs. Female) | 796 | 48 | 42-54 | 436 | 52 | 44-60 | 227 | 46 | 38-55 | 133 | 40 | 30-50 |
| Out of Home Placement | 282 | 6 | 4-8 | 142 | 7 | 4-10 | 101 | 6 | 4-10 | 39 | 4 | 2-7 |
| Alleged Abuse (vs. Neglect) | 843 | 51 | 45-57 | 456 | 54 | 45-62 | 208 | 35 | 28-42 | 179 | 67 | 53-78 |
| Alleged Neglect | 850 | 49 | 43-55 | 454 | 46 | 38-55 | 277 | 65 | 58-72 | 119 | 33 | 22-47 |
| Internalizing Need | 476 | 24 | 21-28 | 271 | 27 | 22-33 | 127 | 23 | 16-30 | 78 | 19 | 12-30 |
| Externalizing Need | 634 | 35 | 31-40 | 372 | 37 | 31-44 | 174 | 33 | 25-42 | 88 | 34 | 25-44 |
| Outpatient MHS T1-T2[a] | 477 | 19 | 16-23 | 305 | 24 | 19-29 | 101 | 12 | 8-19 | 71 | 17 | 10-28 |
| Child Age (M±SD)[b] | 8.9±3.2 | | | 8.9±3.3 | | | 9.1±3.2 | | | 8.5±3.1 | | |

*Note*. Median household income was $20,000-24,999 for the overall sample; $20,000-24,999 for non-Hispanic whites; $15,000-19,999 for African Americans; and $15,000-19,999 for Hispanic Americans. Kruskal-Wallis Test indicates that African American and Hispanic American families reported lower annual household income than non-Hispanic white families, $\chi^2(2) = 35.31$, $p < .001$

[a] African American youths were less likely to use mental health services than non-Hispanic white youths, Design-based $F(2, 165.69)=3.35$, $p=.04$

[b] Hispanic American youths were younger relative to African American youths, $F(2, 1690)=3.01$, $p=.05$

## Table 2

Logistic Regression Analyses Predicting Outpatient Mental Health Service Use at Time 2

| Variable (Referent) | Coefficient | 95% CI |
|---|---|---|
| **Step 1** | | |
| Child Age | .06 | -.04 – .15 |
| Male (Female) | .29 | -.18 – .77 |
| Household Income | -.04 | -.14 – .05 |
| Out of Home Placement | 1.33*** | .58 – 2.07 |
| Abuse (Neglect) | .62* | .14 – 1.10 |
| Race (Non-Hispanic White) | | |
| African American | -.71* | -1.41 – -.01 |
| Hispanic American | -.27 | -1.07 – .53 |
| Internalizing Need | .90*** | .33 – 1.48 |
| Externalizing Need | 1.37*** | .82 – 1.92 |
| **Step 2** | | |
| Child Age | .06 | -.04 – .16 |
| Male (Female) | .31 | -.17 – .79 |
| Household Income | -.04 | -.13 – .05 |
| Out of Home Placement | 1.35*** | .59 – 2.11 |
| Abuse (Neglect) | .66* | .16 – 1.16 |
| Race (Non-Hispanic White) | | |
| African American | -1.43*** | -2.28 – -.58 |
| Hispanic American | -.70 | -2.29 – .88 |
| Internalizing Need | 1.04** | .36 – 1.72 |
| Externalizing Need | .94** | .32 – 1.55 |
| African American × Internalizing | -.24 | -1.67 – 1.18 |
| African American × Externalizing | 1.31* | .01– 2.60 |
| Hispanic American × Internalizing | -.23 | -1.55 – 1.08 |
| Hispanic American × Externalizing | .94 | -.55 – 2.44 |

* $p<.05$,

** $p<.01$,

*** $p<.001$

*Note*. We tested the potential interaction between internalizing and externalizing need. Neither the 2-way (Internalizing × Externalizing) nor 3-way (Race × Internalizing × Externalizing) interactions were statistically significant. The final model presented above therefore assumes that the effects of internalizing and externalizing need on service use are additive rather than interactive.