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Role of Referrals in Mental Health Service Disparities for Racial and Ethnic Minority Youth

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Abstract

Objective—To investigate racial/ethnic differences in teachers' and other adults' identification and/or encouragement of parents to seek treatment for psychiatric problems in their children and to evaluate if and whether identification/encouragement is associated with service use.

Method—Data on identification/encouragement to seek treatment for externalizing disorders (i.e., attention-deficit/hyperactivity disorder, oppositional-defiant disorder, and/or conduct disorder) and internalizing disorders (i.e., major depressive episode/dysthymia and/or separation anxiety disorder) and services used were obtained for 6,112 adolescents (13–17 years of age) in the National Comorbidity Survey Adolescent Supplement. Racial/ethnic differences were examined for Latinos, non-Latino blacks, and non-Latino whites.

Results—There were few racial/ethnic differences in rates of youth identification/encouragement and how identification/encouragement related to service use. Only non-Latino black youth with low severity internalizing disorders were less likely to be identified/encouraged to seek services compared with non-Latino white youth with the same characteristics (odds ratio [OR] = 0.4, 95% confidence interval [CI] = [0.2–0.7]). Identification/encouragement increased the likelihood of seeking services for externalizing and internalizing disorders for all youth. However, compared with their non-Latino white counterparts, non-Latino black youth who met criteria for internalizing disorders appeared less likely to have used any services (OR = 0.4, 95%, CI = 0.2–; 0.7), after adjusting for identification/encouragement, clinical, and sociodemographic characteristics. Non-Latino black youth with internalizing disorders and *without* identification/encouragement were less likely to use the specialty care sector than their non-Latino white counterparts.

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Conclusions—In this study of a nationally representative sample of adolescents, almost no ethnic/racial differences in identification/encouragement were found. However, identification/encouragement may increase service use for all youth.

Keywords

referral; disparities; ethnic; minority; services

Most ethnic/racial minority children with psychiatric disorders remain untreated,^{1–5} are differentially referred within the child welfare or justice system to receive treatment,^{6,7} and receive lower-intensity mental health services when they are treated^{8–10} compared with their non-Latino white peers. Although minority children can benefit from brief psychosocial interventions delivered in school-based health clinics,^{11,12} some studies have indicated that minority parents are less likely than other parents to identify their children's disorders as requiring intervention^{13–15} and to initiate contact with professionals once problems are recognized.¹⁶ Attitudinal barriers,¹³ including uncertainty about treatment benefits,¹⁶ perceptions of barriers to care,¹⁷ and less knowledge about disorders and treatment options⁶ may be involved in these racial/ethnic differences in identification and help-seeking. Schools can be critical in the early detection of mental health problems, because identification and referral by teachers and other adults are among the strongest predictors of youth mental health service use.^{18,19} Indeed, most mental health services received by youth are at school or based on encouragement of school personnel.^{20–22} However, the limited data available on school system referrals have suggested that ethnic minority children with psychiatric disorders are often underidentified for mental health services.^{23,24} If confirmed, this result would suggest that increased efforts to develop school-based identification and referral programs for minority youth with mental health problems might help decrease disparities in the treatment of minority youth with mental disorders.²⁵

Previous studies of school-based identification and referral programs have been geographically limited and often focused on youth already enrolled in services.^{23,24} The present report presents data from the National Comorbidity Survey Replication Adolescent Supplement (NCS-A)²⁶ to investigate racial/ethnic differences in the extent to which parents of adolescents with five mental disorders reported that they were informed by teachers or other adults that their child had problems and/or were encouraged to take their child for mental health treatment and the extent to which this identification/encouragement was associated with mental health services use and in which sectors of care. Whether ethnic and racial minority youth with behavioral health problems are identified/encouraged could have considerable implications for minority youth's health outcomes, but this depends on parents' responses to a child's behavioral problems and whether and where parents seek treatment services for their children.²⁷

METHOD

Sample

The NCS-A was carried out from 2001 through 2004 in a dual-frame (household and school) national sample of adolescents (13–17 years of age) and their parents.^{26,28} The household sample (86.8% conditional response rate) included 904 adolescents from households that participated in the National Comorbidity Survey Replication, a national survey of adults.²⁸ The school sample (82.6% conditional response rate) included 9,244 adolescents from a representative sample of 320 schools in the National Comorbidity Survey Replication counties that agreed to participate in the study. Details on the sample, can be found in Kessler et al.²⁸

Adolescents were interviewed face to face. One parent or surrogate (i.e., the youth's primary care-giver) was asked to complete a self-administered questionnaire (SAQ) about the participating adolescent's developmental and service use history and mental disorders. The response rate, conditional on adolescent participation, of the parent SAQ was 82.5% to 83.7% (household and school samples). The present report focuses on data of the 6,112 adolescent-parent/surrogate dyads that were non-Latino white, non-Latino black, or Latino. Discrepancies between responses obtained in this subset of cases of adolescents whose parent/surrogate did not participate were addressed with a weighting adjustment described elsewhere.²⁸

Adolescent informed assent was obtained before surveying the adolescents or parents, with procedures approved by the human subject committees of Harvard Medical School and the University of Michigan. Most parent/surrogate respondents were primarily biological mothers (range of 82.3% for non-Latino white youth to 74.7% for non-Latino black youth) or biological fathers (range of 10.5% for non-Latino white youth to 7.2% for non-Latino black youth), with few being adoptive/stepparents, grandparents, or foster parents. Cases were weighted for variation in within-household probability of selection (household sample) and residual discrepancies between sample and population sociodemographic and geographic distributions. The weighting procedures are detailed elsewhere.^{26,29} The sociodemographic distributions of the weighted composite sample closely approximate those of the census population, although the sample under-represents minority boys.

Measurements

Diagnostic Assessment—The NCS-A assessed a broad range of *DSM-IV* diagnoses using a modified version of the fully structured Composite International Diagnostic Interview³⁰ administered to adolescents. Parent questionnaires also assessed youth psychiatric disorders for which parents have been shown to be better informants than youth: specifically behavior disorders^{31,32} and depression/dysthymia.³³ The problem that lifetime prevalence is underestimated in retrospective cross-sectional surveys^{34–36} was addressed using special probing procedures that have been shown experimentally to increase the recall of lifetime disorders in adults.³⁷ An NCS-A clinical reappraisal study³⁸ documented good concordance of diagnoses based on the Composite International Diagnostic Interview and parent reports, with those based on blinded clinical reappraisal interviews using the Schedule for Affective Disorders and Schizophrenia for School-Age Children Lifetime Version.³⁹ The present report focuses on the five disorders for which parents completed a SAQ: major depressive episode/dysthymia (MDE/DYS), attention-deficit/hyperactivity disorder (ADHD), oppositional-defiant disorder (ODD), conduct disorder (CD), and separation anxiety disorder (SAD). Subsequently, MDE/DYS and SAD were aggregated as internalizing disorders and ADHD, ODD, and CD as externalizing disorders to examine the associations of interest. Additional NCS-A diagnostic data were used to control for comorbidity in the analytic models. To evaluate the severity of lifetime disorders, indicators of disorder-specific severity were constructed using weighted factor scores. For each disorder, the count of lifetime symptoms from the Composite International Diagnostic Interview and SAQ and several indicators of the extent to which those symptoms interfered with the adolescent's functioning and daily activities were selected. For example, for major depressive disorder, the indicator of severity included a count of the number of *DSM-IV* symptoms that the adolescent and parent indicated the adolescent experienced and the severity of feelings at their worst and the frequency that the adolescent could not carry out daily activities because of symptoms that interfered with school, work, or relationships. For each of the five disorders discussed in this article, these lifetime severity and symptom variables were entered into a principal component analysis and scores of the first component were used as weighted factor scores to estimate disorder severity. Indicators of aggregated

disorder severity were defined as the highest severity level within the disorder type (i.e., externalizing, internalizing).

Problem Identification/Encouragement to Seek Mental Health Services—For each disorder assessed in the parent interview, parents who endorsed symptoms were asked how many teachers or other adults ever told them that their child had problems related to this disorder and how many ever encouraged them to seek help from a professional (henceforth referred to as problem identification/encouragement).

Mental Health Service Use—Adolescent and parent interviews included questions about whether the adolescents had ever received mental health treatment. Four types of services were considered: specialty mental health (outpatient, inpatient, or emergency room services for emotional or substance problems), general medical, school (provided by a school psychologist or counselor or in a special classroom or school), and human services or alternative medicine (e.g., complementary/alternative medicine, justice system, self-help groups, hotlines, spiritual advisors). In the present analysis of the level of services received, for cases in which the adolescent received multiple types of services (e.g., specialty mental health and human services), the youth was assigned to the type of service in the highest category (i.e., first for specialty mental health, second for general health, third for school, and fourth for human services or alternative medicine).

Race/Ethnicity—Race/ethnicity was assessed by self-report using the census categories: non-Latino white, non-Latino black, Latino, and other. Because of the small sample and mixed ethnicity, an “other” group was excluded. Language was not a study factor because the youth and parents had to be English-speakers to participate.

Sociodemographics—Sociodemographic variables considered include respondent’s age, sex, and two measurements of socioeconomic status: parent educational attainment (less than high school, high school, some college, college graduate) and family income (low, low-average, high-average, high, where low was defined as <1.5 times the official federal poverty line, low-average as 1.5–3, high-average as 3–6, and high as 6).

Data Analysis

Racial/ethnic differences in sociodemographic characteristics, psychiatric disorders, identification/encouragement, and treatment within each of the aggregated external (ADHD, ODD, CD) and internal (MDE/DYS, SAD) disorders were examined initially using cross-tabulations and then adjusting for sociodemographic and clinical variables with logistic regression. Interactions between race/ethnicity and symptom severity were included to examine whether severity moderates the relation between race/ethnicity and both identification/encouragement and services use. Associations of race/ethnicity were examined with and without adjustments for identification/encouragement and with interactions of race/ethnicity and identification/encouragement. In those who used services, racial/ethnic differences in types of services received were examined as a function of identification/encouragement. All analyses were conducted in STATA 10.1⁴⁰ with weighted NCS-A data.²⁸ Significance tests were based on Rao-Scott statistics for Pearson χ^2 tests.⁴¹ Variance estimates in logistic models adjusted for the sampling design using the first-order Taylor series approximation. Statistical significance was evaluated using design-adjusted Wald tests using .05-level two-sided design-based tests.

RESULTS

Racial/Ethnic Differences in Sociodemographics and Disorder Prevalence

When comparing the sociodemographics and disorder prevalences across ethnic/racial minority youth, there were no differences in the distribution of age, sex, MDE/DYS, ADHD, ODD, or CD prevalence rates (Table S1, available online). The significant differences across the ethnic/racial groups were the following. There were larger proportions of non-Latino blacks (29.2%) and Latinos (24.2%) compared with non-Latino whites (9.0%) who came from families with a lower income ($p < .001$). There was also a larger proportion of non-Latino whites (42.7%) who had parents with a college degree compared with non-Latino blacks (20.2%) and Latinos (25.7%; $p < .001$). Race/ethnicity was significantly related only to lifetime prevalence of SAD and was more prevalent in non-Latino blacks (10.8%) compared with non-Latino whites (6.8%) or Latinos (7.9%; $p < .05$; Tables S1 and S2, available online). Of those with externalizing disorders, 48.3% of non-Latino white, 54.4% of Latino, and 51.5% of non-Latino black adolescents were into the low symptom severity group. Of adolescents with internalizing disorders, 50.9% of non-Latino white, 46.8% of Latino, and 49.8% of non-Latino black adolescents were in the low symptom severity group versus 49.1% of non-Latino white, 53.2% of Latino, and 50.2% non-Latino black adolescents with high disorder severity.

Racial/Ethnic Differences in Identification/Encouragement in Those Who Meet Diagnostic Criteria

No racial/ethnic differences in the proportion of parents who reported identification/encouragement to seek services were observed for youth fulfilling criteria for externalizing disorders, after adjustments for sociodemographic and clinical characteristics and with interactions between race/ethnicity and symptom severity (Table 1). Additional analyses adjusting for these same characteristics for youth fulfilling criteria for internalizing disorders showed a marginally significant trend for the omnibus test of the interactions between symptom severity and race/ethnicity ($p = .07$). Specifically, non-Latino black youth with low severity internalizing disorders were less likely to be identified/encouraged to receive services than non-Latino white youths with similar severity level (odds ratio [OR] 0.4, 95% confidence interval [CI] 0.2–0.7).

Race/Ethnic Differences in the Association of Identification/Encouragement with Any Mental Health Service Use

The lifetime service use rates of youth fulfilling criteria for externalizing and internalizing disorders whose parents reported identification/encouragement to seek services were not significantly different among racial/ethnic groups (externalizing, 81.1%–89.7%; internalizing, 87.0%–95.7%; Table S2, available online). There were also no significant racial/ethnic differences in lifetime service use rates in those fulfilling criteria for externalizing disorders and not receiving identification/encouragement to seek services. Their services use rates were lower than those who received identification/encouragement (53.6%–67.2%). However, for youth who fulfilled criteria for internalizing disorders but did not receive identification/encouragement to seek services, non-Latino blacks were less likely to use services (47.9%) than their Latino (71.1%) or non-Latino white (72.1%) counterparts ($p < .001$; Table S2, available online).

Additional analyses adjusting for differences in identification/encouragement and clinical and sociodemographic characteristics (Table 2) showed that non-Latino black youth who met the diagnostic criteria for internalizing disorders continued to be less likely to have used services compared with their non-Latino white counterparts (OR 0.4, 95% CI 0.2–0.7). Receiving identification/encouragement to seek services and higher severity of illness

showed a strong relation with services use in adolescents meeting the criteria for externalizing disorders (OR 1.9, 95% CI 1.2–3.2; OR 4.0, 95% CI 2.0–7.9, respectively) and in adolescents meeting the criteria for internalizing disorders (OR 4.3, 95% CI 2.5–7.7; OR 1.7, 95% CI 1.1–2.8, respectively).

Racial/Ethnic Differences in Sector of Care in Those Who Received Services

In youth with externalizing disorders who had used services, those who were identified and/or encouraged to seek treatment had higher rates of specialty mental health services use than those who were not identified/encouraged. There was a significant ethnic/racial difference in the sector of care for youth identified/encouraged to seek services ($p = .025$; Table 3). Non-Latino black youth used fewer specialty mental health services and used more services from schools, human services, complementary and alternative medicine, or care in the justice system compared with their non-Latino white and Latino counterparts.

In addition, higher rates of specialty mental health services use were observed for youths who were identified and/or encouraged to seek treatment of those who fulfilled the criteria for internalizing disorders and had used services. However, differences in sector of care were observed in those without identification/encouragement ($p = .002$; Table 4). Non-Latino black youth with internalizing disorders without identification/encouragement were less likely to use specialty mental health care and more likely to use services from schools, human services, complementary and alternative medicine, and care in the justice system than their non-Latino white and Latino counterparts. Latino youth had higher rates of general services use than non-Latino white or non-Latino black youth.

DISCUSSION

In this study of identification/encouragement and mental health service use patterns in a nationally representative sample of adolescents, there were almost no differences in identification/encouragement for these adolescents. There was less racial/ethnic variation in identification/encouragement than expected, with the exception of non-Latino black youth with internalizing disorders and low symptom severity. This group was significantly less likely to be identified and/or encouraged to seek services compared with their non-Latino white counterparts. Overall, the present results contradict previous reports of widespread differences in referral because of youth race/ethnicity based on regional studies. Although research on racial/ethnic disparities in teachers' referral has not been replicated since the study by Costello and Janiszewski,⁴² referral bias in youth mental health treatment has been well documented in a wide variety of social, legal, and health agencies.^{43–45}

The present findings of lower identification/encouragement of non-Latino black youth with internalizing disorders and low symptom severity are consistent with work by Langrehr⁶ who found that internalizing disorders were much more likely to be detected in non-Latino white youth than in black youth. This is also consistent with some evidence that teachers may have different expectations of the behavior of black youth^{46,47} and may overlook their internalizing symptoms. Alternatively, internalizing disorders with low symptom severity may be expressed differently in black youth, accompanied by irritability, making them difficult to identify in the school setting. Additional research is needed to determine how expectations of behavior are interpreted in the context of race/ethnicity and how differential expression of internalizing disorders influences youth referrals.⁴⁸

The present finding that problem identification/encouragement has a generally positive association with service use occurring in the specialty sector, in those receiving any mental health care, is consistent with work by Farmer et al.²¹ Schools may need to train mental health practitioners to encourage parents to seek mental health services in the specialty

sector, especially given the decreased funding nationwide despite an increased need.⁴⁹ Mental health services through the specialty sector augments the opportunities for interagency collaboration and addressing multiple and complex youth needs compared with entering through school services.²¹

The present finding that the association of problem identification/encouragement with service use in the specialty sector is generally unrelated to race/ethnicity was encouraging. In this study, no differences in access to behavioral health services were found, except for non-Latino black youth with internalizing disorders. These youth appear less likely to have used any services compared with their non-Latino white counterparts. In addition, in the absence of identification/encouragement, non-Latino black youth are less likely to receive specialty care. However, this is inconsistent with evidence from previous studies showing that minority youth with detected emotional problems within the child welfare or juvenile justice system are more likely than comparable non-Latino youth to be routed away from mental health treatment.^{6,7} This might be due to regional patterns or to the fact that these differential referrals of minority youth occurred in children already involved with the child welfare system or in the juvenile system than children in the school system. Facilitating entrance to the specialty sector by identification and encouragement might be particularly helpful for non-Latino black youth who are at risk of not receiving specialty mental health services.

Several study limitations should be noted. First, the NCS-A survey questions ask about problem identification/encouragement to seek services by “teachers and other adults.” One cannot assume that these are exclusively referrals made by teachers because other school personnel or adults who come into contact with the youth in other parts of their lives (e.g., neighbors, religious or community service workers, criminal justice professionals) could be the source of referrals,^{20–22,43} although in some cases these might be in response to teachers’ evaluations of student classroom behaviors.^{50–53} Yeh et al.²⁴ found that referral pathways into specialty services differ by race/ethnicity. Non-Latino white children were more likely to receive their referral directly from schools, African Americans from the juvenile justice system, Asian/Pacific Islanders from child welfare, and Latinos from their families. Therefore, the present results cannot state the relative importance of teachers compared with other adults who may be identifying youth and encouraging service access.

Second, the authors had no information about the race/ethnicity of the adult making the referrals to investigate whether this had an influence on referral patterns. Third, the authors had no way to evaluate the accuracy of parent reports of problems because no complementary information from teachers or administrative records was available to validate these reports. Future studies should consider cross-referencing school records of referrals/encouragement by teachers with parental reports. Further, retrospective parent reports may be influenced by current symptoms or service use, although the authors know of no evidence in previous studies that ethnic/racial minority parents would differentially report compared with non-Latino white parents.

Notwithstanding these limitations, the present findings highlight the limited extent of ethnic/racial differences in the identification and/or referral of youth for mental health problems. A possibility is that training of teachers over the past 20 years has led to more equitable screening and referral procedures that have decreased bias in the evaluations of ethnic/minority youth.

For most disorders, identification/encouragement does not demonstrate racial/ethnic group differences with access to any mental health services. The exception is for non-Latino black youth who meet diagnostic criteria for internalizing disorders and have *not* received

identification/encouragement. The question of whether this is due to preferences for not seeking care in the specialty sector or whether it represents expectations of limited benefits in seeking this type of care requires further investigation. However, there is some differential association between identification/encouragement and the sector in which care is received for internalizing problems. The authors found that identification/encouragement could potentially address the problem of low treatment in the specialty sector for non-Latino black youths who meet criteria for internalizing disorders because they did not observe the same differential pattern in youth who were identified or encouraged to seek services. However, it is important to realize that these results do not speak to the issue of treatment quality, which might well differ by race/ethnicity because of differences in sectors of treatment (e.g., specialty treatment versus school or human services sector) with an increased likelihood that specialty care can provide increased access to evidence-based treatments. Nor do they speak to the possibility that identification/encouragement might have additional effects on timing of treatment initiation and retention in specialty treatment that could differ by race/ethnicity. The findings are clear that identification/encouragement is an important overall correlate to obtaining treatment, and this is so for minority and for non-Latino white youth. This suggests that expanding and targeting identification/encouragement might be useful for addressing the problems of access for all youth independent of race/ethnicity. Nevertheless, family, school, and community involvement is an important requirement, and screening must be linked to the development of comprehensive programs of school mental health.⁵⁴

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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TABLE 1

Relation of Identification/Encouragement to Seek Services With Race/Ethnicity and Severity, Stratified by Meeting Diagnostic Criteria for Externalizing and Internalizing Disorders

	Identification/Encouraged: Yes vs. No	
	Externalizing Disorders (n = 536) OR (95%CI)	Internalizing Disorders (n = 1,170) OR (95%CI)
Race/ethnicity	$F_{2,4} = 0.4, p = .7$	$F_{2,4} = 4.8, p = .01$
Severity of symptoms	$F_{1,4} = 65.1, p < .0001$	$F_{1,4} = 0.2, p = .7$
Race/ethnicity $\times$ severity	$F_{2,41} = 1.33, p = .28$	$F_{2,41} = 2.90, p = .07$
Low severity		
Latino vs. white	0.7 (0.3–1.5)	1.1 (0.5–2.5)
Black vs. white	0.9 (0.3–2.4)	0.4 (0.2–0.7) *
High severity		
Latino vs. white	2.3 (0.5–11.0)	0.9 (0.3–2.3)
Black vs. white	1.5 (0.6–3.7)	1.0 (0.5–2.0)

Note: Adjusted for age, sex, parent education, parent income, lifetime disorders, and number of lifetime disorders. CI = confidence interval; OR = odds ratio.

*
p < .05.

TABLE 2

Relation of Services Use With Identification/Encouragement to Seek Services, Race/Ethnicity, and Severity of Illness Among Those Meeting Diagnostic Criteria for the Particular Disorders ***

	Services Use: Yes vs. No	
	Externalizing Disorders (n = 1,212) OR (95%CI)	Internalizing Disorders (n = 1,401) OR (95%CI)
Identification/encouragement	$F_{1,42} = 6.8, p = .01$	$F_{1,42} = 27.0, p < .001$
No	1	1
Yes	1.9 (1.2–3.2) *	4.3 (2.5–7.7)**
Race/ethnicity	$F_{2,41} = 0.05, p = .95$	$F_{2,41} = 6.49, p = .004$
Non-Latino white	1	1
Latino	1.0 (0.6–1.6)	1.0 (0.7–1.4)
Non-Latino black	0.9 (0.4–2.1)	0.4 (0.2–0.7)**
Symptom severity	$F_{1,42} = 16.98, p = .0002$	$F_{1,42} = 5.6, p = .02$
Low	1	1
High	4.0 (2.0–7.9)**	1.7 (1.1–2.8) *

Note: Adjusted for age, sex, parent education, parent income, lifetime disorders, and number of lifetime disorders. CI = confidence interval; OR = odds ratio.

*
p < .05,

p < .001.

TABLE 3

Setting in Which Mental Health Services Are Received by Disorder-Specific Identification/Encouragement Among Racial and Ethnic Groups for Those With Externalizing Disorders Who Have Used Services

Among Those Who Meet Criteria for Externalizing Disorders	Non-Latino White (Yes: n = 622; No: n = 179)		Latino (Yes: n = 131; No: n = 53)		Non-Latino Black (Yes: n = 171; No: n = 56)		Omnibus Test (Race/Ethnicity and Service Type)	
	%	SE (%)	%	SE (%)	%	SE (%)	F	p
Identification/encouragement = yes								
Specialty MH	84.3	2.3	82.2	6.4	63.9	5.5	2.7	0.025
General	7.4	1.5	7.9	3.9	9.1	3.2		
School	6.0	1.4	7.5	3.8	16.3	5.5		
Human services, CAM, justice system	2.2	1.3	2.4	1.4	10.7	4.1		
Identification/encouragement = no								
Specialty MH	65.2	6.0	65.9	12.9	56.8	9.9	0.8	0.520
General	6.4	3.2	13.5	8.1	11.0	4.5		
School	20.4	5.3	8.0	5.1	21.1	7.0		
Human services, CAM, justice system	8.1	3.8	12.6	9.3	11.0	7.7		

Note: Types of services are hierarchical and does not consider medication use (there were 23 of the entire sample who did not use any services but had used medication). CAM = complementary and alternative medicine; MH = mental health; SE = standard error.

TABLE 4

Setting in Which Mental Health Services Are Received by Disorder-Specific Identification/Encouragement Among Racial and Ethnic Groups With Internalizing Disorders Who Have Used Services

Among Those Who Meet Criteria for MDE/Dysthymia/SAD	Non-Latino White (Yes: n = 284; No: n = 652)		Latino (Yes: n = 57; No: n = 159)		Non-Latino Black (Yes: n = 65; No: n = 184)		Omnibus Test (Race/Ethnicity and Service Type)	
	%	SE (%)	%	SE (%)	%	SE (%)	F	p
Identification/encouragement = yes								
Specialty MH	90.0	2.5	92.5	4.1	78.8	7.0	2.1	0.066
General	3.8	1.1	2.9	2.0	4.2	1.9		
School	5.8	2.1	2.0	2.1	9.9	5.1		
Human services, CAM, justice system	0.5	0.4	2.5	1.9	7.0	5.9		
Identification/encouragement = no								
Specialty MH	74.4	3.9	59.2	9.3	46.0	6.8	4.3	0.002
General	7.6	2.1	17.4	6.0	3.0	1.6		
School	9.0	1.5	10.5	3.7	30.4	8.3		
Human services, CAM, justice system	9.0	2.3	12.9	5.7	20.5	4.9		

Note: Types of services are hierarchical and does not consider medication use (there were 23 of the entire sample who did not use any services but had used medication). CAM = complementary and alternative medicine; MDE = major depressive episode; MH = mental health; SAD = separation anxiety disorder.