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Race Differences in the Receipt of Mental Health Services Among Young Adults

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This study investigates race and ethnic differences in the receipt of mental health services among young adults. Research has indicated that racial minorities receive treatment at a much lower rate than those with middle and upper incomes and Whites. We use data from the National Longitudinal Study of Adolescent Health, a nationally representative study of young adults, first interviewed when in Grades 7 through 12. We find significant differences across race-ethnicity. Consistent with prior research, Blacks are less likely to have received mental health services. Findings for gender and education differed from previous studies. The relationship of gender on services receipt is mediated by depression. The relationship of race-ethnicity on services receipt is moderated by levels of education and prior services use. Education is associated with greater services use for Whites, but less services use for Blacks. Also, Blacks who used services in the past are significantly less likely to be current users. The implications of these results are discussed.

Keywords: race and mental health services, young adult mental health

In this article, we investigate race differences in the receipt of mental health services among young adults. Mental illness plays a significant role in the health and well-being of individuals and communities throughout the United States and the world. Worldwide, at least 25% of all people are affected by a mental or behavioral disorder at some time during their lives (World Health Organization [WHO], 2001). Results from the National Comorbidity Survey found that about 48% of people in the United States have a mental or behavioral disorder at some time during their lives (Kessler et al., 1994).

Estimates are that about 30% of adults and 20% of children are in need of clinical treatment (Comer, 2004). Several effective treatment methods have been used recently, including medications, therapy, rehabilitation, and other forms of treatment (Drake, Green, Mueser, & Goldman, 2003). Despite the availability of treatments for those with mental illnesses (Hogan, 2003), it is estimated that only about half of those that need treatment actually receive it (Alegría et al., 2007; Neighbors et al., 2007; Wang, Demler, & Kessler, 2002).

Unmet need for treatment has been found to be differentially associated with race and socioeconomic status. Racial minorities have less access to mental health services (Hogan, 2003; Mojtabai, 2005; Snowden & Yamada, 2005). Research has indicated that racial minorities and individuals with low income and education levels receive treatment at a much lower rate than Whites and those with middle and upper incomes (Neighbors et al., 2007; Snowden, 2001; Snowden, Masland, Fawley, & Wallace, 2009; Snowden & Yamada, 2005; Wang et al., 2005). For example, one nationally representative study found that Blacks and Latinos were only 50–60% as likely to receive services as were Whites (Wang et al., 2005). Another study found important race-ethnic differences across gender (Ojeda & McGuire, 2006). Specifically, Black men and women, and Latinas were only about 25–40% as likely to receive services as were non-Latino Whites (Ojeda & McGuire, 2006). Research shows racial and ethnic minorities experience disparities in mental health and health care even when controlling for health insurance coverage and socioeconomic status

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(Narrow, Rae, Robins, & Regier, 2000; Padgett, Patrick, Burns, & Schlesinger, 1994; Shi, 2000; Snowden & Yamada, 2005).

Studies show that although there are many U.S. citizens with mental disorders who do not use mental health services, the level of *unmet need* for mental health care is substantially *higher* for Blacks and Latinos than it is for White Americans, even though overall rates of disorder are roughly equivalent by race-ethnicity (Cooper-Patrick et al., 1999; Wang et al., 2005). Adult Latinos and Blacks receive about half as much outpatient mental health care as Whites. Analyzing data from the 1990–1992 National Comorbidity Survey, Alegría and colleagues (Alegría et al., 2002) compared outpatient and specialty mental health services rates for adult non-Latino Whites, Latinos, and Blacks. They found that Latinos had the lowest service use rates for both sectors when compared to non-Latino Whites or Blacks. Similar findings were also found for Latino young adults with psychiatric disorders (Hough, Hazen, Soriano, McCabe, & Yeh, 2002). The general availability of mental health services highlights the need to better understand the determinants of unmet need.

Recent studies have focused on the use of services for mental health problems among young adults (Cranford, Eisenberg, & Serras, 2009; Golberstein, Eisenberg, & Gollust, 2008). However these studies, and most other studies of young adults, focus exclusively on college students. Although it is very important to study patterns of services use for college students, this limits our understanding of service use for the overall young adult population, since most young adults do not attend college (in Table 1, the figure is 36%). Research in this area of study is limited for young adults who do not attend college. Young adults in college differ significantly from those young adults who are not in college. College attendees tend to be of higher socioeconomic status and are more likely to be White and/or female (Aguirre & Turner, 2007). Therefore, studies are needed that focus on the entire young adult population. In addition, many studies of the young adult population have only limited racial and ethnic diversity in their samples (e.g., Golberstein et al., 2008). Thus we know little about how race and ethnicity influence patterns of services use among a broader population of young adults.

In the present article, we examine race and ethnicity as factors in mental health services receipt for the broader young adult population. We use national level data to investigate this issue. The use of national data allows for the study of a more ethnically and socioeconomically diverse sample and one not limited to only young adults who are college students. We want to examine this issue and discover if patterns for the general adult population are similar for the young adult population. This is an important endeavor as it allows us to observe if patterns of disparities in utilization of mental health services begin in early adulthood.

Table 1
Descriptive Data for the Sample (Means and Proportions) Race-Ethnicity

Demographic variables	White	Black	Latino	Total
Age	21.80	21.81	21.85	21.81
Gender (1 = *male*; 0 = *female*)	.49	.48	.48	.48
Education	13.33	13.10	12.69	13.20*
Race	.58	.24	.11	—
Depression (Wave 1)	10.03	11.66	12.32	10.71*
Depression (Wave 3)	4.14	4.84	5.05	4.43*
Dx with depression (1 = *yes*; 0 = *no*)	.14	.06	.09	.11*
Currently in college (1 = *yes*; 0 = *no*)	.38	.36	.29	.36*
Prior services use (1 = *yes*; 0 = *no*)	.13	.09	.13	.12*
Current services use (1 = *yes*; 0 = *no*)	.09	.05	.07	.07*

Note. All values presented are for young adults (Wave 3) unless otherwise indicated. Dx = diagnosed. Means are presented for the variables age, education, and Waves 1 and 3 depression. All other values are proportions.
* Race differences are significant at $p < .05$.

Method

Participants

The data used in this research are from the National Longitudinal Study of Adolescent Health (Add Health) (Bearman, Jones & Urdy, 1997), a nationally representative study of young adults, first interviewed as adolescents in Grades 7 through 12 (Bearman et al., 1997). They were then from ages 13 to 18. The first round of the Add Health data was collected in 1994–1995, with follow-ups in 1996 and 2001. The study was designed to investigate adolescent health, health behavior, and relationships, among other issues. In the data collection, a multistage, stratified, school-based, cluster sampling design was used to first collect data in schools. Approximately 120,000 young adults were eligible for a school interview, and more than 90,000 young adults completed the in-school questionnaire. From among those eligible for the school interview, a portion of the students were selected for in-home interviews. Wave 1 interviews were conducted with 20,745 young adults. More information on the Add Health project is available from other sources (Bearman et al., 1997; Blum, Beuhring, & Rinehart, 2000).

In the analysis below, we use data from Wave 1, when respondents were adolescents, and Wave 3, when respondents are young adults, between 18 and 26 years of age. Wave 1 interviews were conducted with 20,745 young adults. We use the public use in-home dataset, which consists of a randomly generated half sample of the core in-home interviews (n = 6,504), collected in 1994–1995. The Wave 3 data were collected in 2001. The number of cases was 4,881). We also control for the design effects in the analysis by using cluster and weight variables and analyze the data using the statistical package, STATA 9 (StataCorp, 2005).

Measures

Demographic measures used in the analysis are age, sex, race-ethnicity, and education. In the analysis below, we use age from Wave 3, in young adulthood, and sex and race-ethnicity measures from Wave 1, because they are constant across study waves. Young adults self-identified their age, sex, and race-ethnicity in Wave 1. Age is measured in years, and sex is a dummy variable, where 1 = *male* and 0 = *female*. Race-ethnicity was ascertained using two questions. One asked "Are you of Hispanic or Latino origin?" and the other, "What is your race?" From these questions, we constructed the race-ethnic categories. Three dummy variables were created to represent race-ethnicity for White (non-Hispanic), Black (non-Hispanic), and Latino adolescents and young adults. We omitted responses from other racial-ethnic groups, including Native and Asian American, because of the small numbers of respondents that identified with any of these additional racial-ethnic categories. Education was measured in Wave 3 from a question asking respondents the number of years completed. We also use a measure of whether or not the respondent was currently attending college from the Wave 3 data. A variable is created for respondents currently in college, where 1 = *currently in college* and 0 = *not currently in college*.

Two sets of mental health measures were used. The first set is Wave 1 and Wave 3 measures of depressive symptoms, based on the widely used CES-D depression scale (Radloff, 1977). The Wave 1 scale is composed of 19 items, which asked participants to report whether or not they felt depressive symptoms (i.e., sadness, failure, poor appetite) in the past week. Higher scores indicate greater depressive symptomatology. Alpha for this measure is good at .86 (Radloff, 1977). In Wave 3, only nine of the original 19 items were used to measure depressive symptoms. Core items such as sadness, lethargy, and "the blues" remained. The alpha value is .86 for Wave 3 depression (Radloff, 1977). For both waves, interviewees recorded responses that ranged from 0 to 3, where 0 corresponded to *never* and 3 corresponded to *a lot* or *often*. We summed across the items to form the scales. The second measure of mental health is based on a question from Wave 3 data, which asked young adults if they had ever been diagnosed with depression. The measure is dummy coded, where 1 = *yes* and 0 = *no*.

We utilize a measure of prior services use and current services use. The prior use measure is used because research has shown that an important predictor of current use of mental health services is whether the person has used such

services in the past (Yeh et al., 2002). Prior receipt of mental health services is measured from a question asked in adolescence (Wave 1): "In the past year, have you received psychological or emotional counseling?" Current receipt of mental health services is identically measured, using the same question as in Wave 1, but, of course, the Wave 3 measure is used. Both measures are dummy coded, where 1 = *receipt of services* and 0 = *did not receive services.*

Results

Table 1 presents descriptive data for the variables used in the study for the three racial groups of interest and for the overall sample. No differences can be seen for the results for age and sex. There are significant differences for almost all other variables. There are differences for education. Latino young adults have the lowest levels of education, whereas the means for Black and White young adults are similar. Depression levels differ. Levels of depression are significantly lowest for the White young adults, followed by Black young adults. Depression levels are highest for Latinos. This is true both during adolescence and in young adulthood. However, it is very interesting to note that the self-report of a depression diagnosis is different. In this case, it is the White young adults who report the highest level.

Consistent with overall levels of education, there are significant differences in current college attendance. Latinos are the least likely to currently be in college, whereas rates for Black and White young adults are similar. Services receipt, both prior and current, also differs by race-ethnicity. Whites and Latinos are equally likely to have received services in adolescence and have similar levels of current receipt. Blacks are significantly less likely to have received help, both in adolescence, and in young adulthood.

Table 2 presents results of our basic logistic regression model showing the relationship between mental health services receipt and various predictors. All equations present odds ratios. The first column presents results for the demographic variables. Sex is highly significant; men are significantly less likely than women to receive services. Race is the only other demographic variable of significance. Blacks are significantly less likely to receive services than all other race-ethnic groups. The next two rows add in the variables current college attendance and prior services receipt, respectively. Note first that the inclusion of these variables does not change the relationship of the demographic variables to services receipt. Gender and race are still significant. Black young adults, and men, are less likely to have received services than are other race-ethnic groups and women, respectively. But current college attendance and prior services receipt are strong positive predictors of current services receipt. Those young adults in college are significantly more likely to receive services than those not in college, and prior services receipt more than doubles the odds of current services receipt.

Table 2
Logistic Regression of Services Use in Young Adulthood on Predictors I

Demographic variables	Equation I	Equation II	Equation III
Age	.95	.99	.97
Gender (1 = *male*)	.55**	.57**	.58**
White	.97	.98	.97
Black	.49**	.49**	.51**
Latino	.78	.80	.76
Education	1.01	.97	.99
Currently in college	—	1.50**	1.53**
Prior services use	—	—	2.59**
N	4,876	4,856	4,850
Pseudo R^2	.02	.02	.04
−2 Log likelihood	1263.22	1246.81	1217.94

Note. Odds ratios are presented.
* $p < .05$. ** $p < .01$.

Table 3 present results from a logistic regression of services receipt on various predictors, for both the overall sample and for the different race-ethnic groups. In these equations, we add in measures for depression, both in adolescence and in young adulthood, and the respondent report of a diagnosis of depression. First, we discuss the results for the overall sample. All results for the variables discussed in Table 2 are identical with one notable exception: the lack of significance of gender. Now that variance from the other predictors is accounted for, the relationship between gender and the receipt of services is no longer statistically significant. Performing tests for mediation as recommended by Baron and Kenny (1996), we have a situation of perfect mediation, whereby the effect of gender is mediated by the variables depression and the diagnosis of depression. Gender, the two depression variables, and services receipt are all significantly correlated. Three regression equations are recommended and were performed. These results show that gender significantly affects depression and the diagnosis of depression, gender significantly affects services receipt; and both depression and the diagnosis of depression significantly affect services receipt, and lastly, we see in Table 3 that gender is no longer of significance in services receipt.

Race remains of significance even when depression diagnosis is included; Blacks are still significantly less likely than other race-ethnic groups to have received mental health services. In this equation for the overall sample, we see the critical importance of depression. There is a significant increase in the likelihood of services receipt due to depression in young adulthood. However, a depression diagnosis is of especially great significance on receipt of services. Those with a diagnosis of depression are more than 10 times more likely than those without to have received services.

Table 3 also presents the logistic regression equations for the different race-ethnic groups. There are two instances of moderation. First, we see evidence of statistical moderation between race and education in the prediction of mental health services receipt. For Whites, higher levels of education increase the likelihood of services receipt. However, for Blacks, higher levels of education decrease the likelihood of receiving services. Thus education has a different pattern of effects on services receipt across race-ethnicity, as is shown in Table 4. The other instance of moderation is for prior receipt of services. Prior services receipt is a factor only for Whites and Blacks, but in different directions, as shown in Table 5. Other predictors differ across race-ethnicity as well. Current college attendance is of significance for Whites and Blacks, but not Latinos. However, we could not confirm a pattern of moderation in additional

Table 3
Logistic Regression of Services Use in Young Adulthood on Predictors II Race-Ethnicity

Demographic variables	Total	White	Black	Latino
Age	.96	.93	.89	1.01
Gender (1 = *male*)	.86	.91	.72	.89
White	.81	—	—	—
Black	.53*	—	—	—
Latino	.77	—	—	—
Education	1.08	1.15**	.72*	1.26
Currently in college	1.59**	1.61**	2.50*	1.26
Prior services use	1.35*	1.60*	.16*	1.45
Depression (Wave 1)	.99	.99	1.00	1.00
Depression (Wave 3)	1.08**	1.08**	1.07	1.15**
Dx with depression	10.46**	9.65**	21.78**	11.57**
N	4,839	2,819	1,161	522
Pseudo R^2	.20	.20	.27	.24
−2 Log likelihood	1005.34	655.87	153.15	95.61

Note. Values are odds ratios. Dx = diagnosed.
* $p < .05$. ** $p < .01$.

Table 4
Logistic Regression of Services Use in Young Adulthood on Predictors and Moderators: Education × Race

Age	.96	.96	.96
Gender (1 = *male*)	.85	.85	.86
White	.05**	.80	.81
Black	.52*	61.91**	.53*
Latino	.70	.79	.25
Education	.94	1.13**	1.07
Currently in college	1.61**	1.61**	1.58**
Prior services use	1.35	1.37*	1.34
Depression (Wave 1)	.99	.96	.99
Depression (Wave 3)	1.08**	1.08**	1.08**
Dx with depression	10.50**	10.66**	10.50**
White × Education	1.23**	—	—
Black × Education	—	.69**	—
Latino × Education	—	—	1.09
N	4,839	4,839	4,839
Pseudo R^2	.21	.21	.20
−2 Log likelihood	1001.45	998.58	1005.03

Note. Values are odds ratios. Dx = diagnosed.
* $p < .05$. ** $p < .01$.

Table 6
Logistic Regression of Services Use in Young Adulthood on Predictors and Moderators: In College × Race

Age	.96	.96	.96
Gender (1 = *male*)	.86	.86	.86
White	.65	.81	.81
Black	.53*	.58	.53*
Latino	.74	.77	.83
Education	1.08	1.08	1.08
Currently in college	1.15	1.63**	1.62**
Prior services use	1.34	1.35	1.34
Depression (Wave 1)	.99	.99	.99
Depression (Wave 3)	1.08**	1.08**	1.08**
Dx with depression	10.60**	10.49**	10.47**
White × In College	1.61	—	—
Black × In College	—	.84	—
Latino × In College	—	—	.80
N	4,839	4,839	4,839
Pseudo R^2	.20	.20	.20
−2 Log likelihood	1003.67	1005.21	1005.03

Note. Values are odds ratios. Dx = diagnosed.
* $p < .05$. ** $p < .01$.

analyses, as is shown in Table 6. Recent depression and a depression diagnosis are generally significant predictors for all race-ethnic groups. For all respondents, except in one case, the likelihood of services receipt is increased because of Wave 3 depression, and the odds of services receipt are greatly increased due to depression diagnosis. Only Wave 3 depression fails to achieve statistical significance for Blacks, as shown in Table 3.

Table 4 presents results from a logistic regression of services receipt on various predictors. The three equations in this and the following table are from three different logistic regression analyses examining the hypothesis of statistical moderation across race. In the case of Table 4, the

Table 5
Logistic Regression of Services Use in Young Adulthood on Predictors and Moderators: Prior Services Use × Race

Age	.96	.96	.96
Gender (1 = *male*)	.86	.86	.86
White	.77	.81	.81
Black	.53*	.64	.53*
Latino	.77	.76	.72
Education	1.08	1.08*	1.08
Currently in college	1.58**	1.60**	1.59**
Prior services use	1.12	1.56**	1.31
Depression (Wave 1)	.99	.99	.99
Depression (Wave 3)	1.09**	1.09**	1.08**
Dx with depression	10.42**	10.44**	10.47**
White × Prior Services Use	1.30	—	—
Black × Prior Services Use	—	.13**	—
Latino × Prior Services Use	—	—	1.29
N	4,839	4,839	4,839
Pseudo R^2	.20	.21	.20
−2 Log likelihood	1005.03	1000.26	1005.20

Note. Values are odds ratios. Dx = diagnosed.
* $p < .05$. ** $p < .01$.

impact of education on services receipt for the different race-ethnic groups is assessed. As discussed above, we see evidence of moderation. The impact of education in relationship to services receipt differs for race-ethnic groups. For Whites, higher levels of education are associated with greater receipt of services. For Blacks, higher levels of education are associated with a lower receipt of services. Results for Latinos are not significant.

As in Table 4, Table 5 presents three equations from logistic regressions of services receipt on various predictors, examining the hypothesis of statistical moderation across race. In Table 5, the impact of prior services use is assessed. There is evidence of moderation. The impact of prior services use in relationship to current services receipt differs for race-ethnic groups. For Blacks, prior services use is associated with lower current services receipt. Results for Whites and Latinos are not significant.

As in Table 4, Table 6 presents three equations from a logistic regressions of services receipt on various predictors, examining the hypothesis of statistical moderation across race. In Table 6, the impact of currently being in college is assessed. There is no evidence of moderation. The impact of currently being in college in relationship to current services receipt does not differ for race-ethnic groups.

As in Table 4, Table 7 presents three equations from a logistic regressions of services receipt on various predictors, examining the hypothesis of statistical moderation across race. In Table 7, the impact of depression in young adulthood (Wave 3) is assessed. There is no evidence of moderation. The impact of depression in young adulthood in relationship to current services receipt does not differ for race-ethnic groups.

Discussion

In this article, we examined race differences in the receipt of mental health services among a national sample of young adults. We found significant differences across race-ethnicity. Consistent with prior research, Blacks were less likely to have received mental health services. Although there were several other variables of significance in services receipt, none explained the relationship between race-ethnicity and the receipt of services. There were significant moderators of importance. The level of education had different effects across race. For Whites, higher education was associated with greater services receipt. However, for Blacks, higher education was associated with lower receipt of services. The relationship of race and the receipt of services was also moderated by the variable, prior use of services. For Blacks only, prior use of services was associated with lower current services receipt.

Table 7
Logistic Regression of Services Use in Young Adulthood on Predictors and Moderators: Depression (Wave 3) × Race

Age	.96	.96	.96
Gender (1 = *male*)	.86	.86	.86
White	1.10	.81	.81
Black	.53*	.46*	.53*
Latino	.76	.77	.49
Education	1.08	1.08	1.08
Currently in college	1.59**	1.58**	1.59**
Prior services use	1.34	1.35	1.34
Depression (Wave 1)	.99	.99	.99
Depression (Wave 3)	1.12**	1.08**	1.08**
Dx with depression	10.49**	10.46**	10.49**
White × Depression (Wave 3)	.96	—	—
Black × Depression (Wave 3)	—	1.02	—
Latino × Depression (Wave 3)	—	—	1.06
N	4,839	4,839	4,839
Pseudo R^2	.20	.20	.20
−2 Log likelihood	1003.71	1005.16	1004.24

Note. Values are odds ratios. Dx = diagnosed.
* $p < .05$. ** $p < .01$.

One of the most long-standing and consistent findings from the research in this area concerns the influence of gender on services use (Kessler, Brown, & Broman, 1981). We did find that pattern in Table 2; however, we found in Table 3 that controlling for current depression and a diagnosis of depression explained the pattern. Analyses confirmed that the conditions for mediation were met in this analysis (Baron & Kenny, 1986), and we had a situation of perfect mediation. That is, the gender difference in services receipt was reflective of the fact that men and women differed in the likelihood of depression, which accounted for the gender difference in the receipt of mental health services.

An important finding from the research concerns the impact of education on services receipt. We found evidence of a different pattern of influence across race-ethnicity. For Blacks, as education increased, the likelihood of services receipt decreased. The opposite pattern held for Whites: as education increased, the likelihood of services receipt increased. Current college attendance was also of significance. Young adults in college were significantly more likely to use services than those not in college, which is consistent with prior research. Because students have access to mental health services on college campuses, young adults in college have a higher rate of mental health services use than noncollege young adults (Cook, 2007).

Not surprisingly, both current depression and self-reported depression diagnosis were associated with greater receipt of mental health services. Consistent with prior research, this is to be expected. Having a need for mental health services generally increases the likelihood of use (Alegría et al., 2007; Kessler et al., 1981; Neighbors et al., 2007; Wang et al., 2005). In much of the prior literature, prior use of mental health services has been found to increase current use (Wang et al., 2005). Significantly, we found the opposite pattern for the Black young adults in this analysis: prior use was associated with a decreased likelihood of current services receipt for the Black young adults only. Because a great deal of prior research uses either only White samples, or largely White samples, future research will need to examine this pattern and determine if it can be replicated. It may be that much of the previous research that notes prior services use as important in current services use lacks sufficient racial and ethnic diversity to examine this pattern across race-ethnicity.

Limitations

One limitation of the analyses presented here is the measure of services receipt. Although it is a useful measure, it captures a limited and uncertain range of professional services providers. In asking about the use of services, the question "have you received psychological or emotional counseling?" has both an important strength and important weaknesses. A strength of the question is that the use of any professional services receipt is captured through a single item asking about the receipt of counseling. It serves to focus the attention of the respondent on the help received. This approach is inclusive; it likely captures *any* experience of receiving counseling. However, an important weakness is that we do not know who the respondent received the help from. It could have been from a medical doctor, a religious leader, or a specialty mental health provider. This is a limitation for the research here because the different types of providers are not delineated. This lack of delineation might be important in helping to understand both the pattern of mediation found in this article and the patterns of moderation found. It might be that respondents have in mind different professional sources when answering the question. Perhaps the Black respondents are more likely than Whites and Latinos to be thinking of religious leaders, given that the average Black young adult is more religious than the average non-Black young adult (Chatters, 2000). The limitation of the question used precludes our examination of such a speculation.

Another limitation concerns the measure "diagnosed with depression." It is self-reported, and as such, is not as good of a measure as an actual diagnosis or the use of a diagnostic instrument, such as the WHO–Composit International Diagnostic Interview (Alegría et al., 2007; Kessler et al., 1981; Neighbors et al., 2007; Wang et al., 2005). It is not clear if the measure may underestimate or overestimate the true prevalence of depression. Future studies can address this question.

Implications for Research

We used a large, nationally representative sample of young adults in conducting this analysis and found a different set of results than that previously reported. Clearly the results of this research need to be replicated. However, one important advance of this research is the use of the sample. Much of the prior research on young adults focuses exclusively on college populations and/or does not use random samples. On the basis of our research, this may not be the best strategy for examining mental health services use among young adults. It is also the case that a great deal of the prior research lacks racial and ethnic diversity in their samples. This, also, likely hinders efforts to delineate the patterns of mental health services use among young adults. Future studies demand data with sufficient racial and ethnic diversity to examine services receipt patterns across race-ethnicity.

Implications for Practice

There are three important implications for mental health professionals from this research. The first is that although women are found in almost all research to be greater users of mental health services, our findings show that it is not gender per se, among young adults, but rather it is mental health that drives services use. When we controlled for depression and self -reported depression diagnosis, there were no gender differences. Further, those with a depression diagnosis were more than 10 times more likely to use mental health services than those without a diagnosis of depression. Black young adults were more than 20 times more likely to use mental health services than those without a diagnosis of depression. Thus, need for professional mental health services is the most important factor in whether a young adult actually uses the service, not demographics.

A second implication for practitioners concerns our findings regarding education. Increasing levels of education had different effects for Blacks and Whites. Traditionally, research on the use of mental health services has always reported that with increasing education, services use increases. We did find this pattern for Whites, but not for Blacks. We suggest that the results of prior studies may help us to understand this. Some research suggests that Blacks are more likely to believe that mental health problems would improve with professional treatment (Anglin, Alberti, Link, & Phelan, 2008). Because a breakdown across education levels was not included in that research, it is unclear if this equally affects Blacks of all education levels, but it is a possibility. Stigma may be of concern to many Blacks in the use of mental health services (Alvidrez, Snowden, & Kaiser, 2008; Cruz, Pincus, Harman, Reynolds, & Post, 2008; Mishra, Lucksted, Gioia, Barnet, & Baquet, 2009; Nadeem et al., 2007). This may be especially true for Blacks with higher levels of education, who are more likely to have professional level jobs. Research with focus groups of Blacks regarding mental health services use revealed that stigma, lack of knowledge, trust, and cultural understanding, constituted key barriers to using mental health services (Thompson, Bazile, & Akbar, 2004). Of importance to note is that fact that the average education level of the focus group participants was 18 years, or the equivalent of 2 years of graduate/professional school. Therefore, the possibility of stigma and factors such as lower trust and beliefs about mental health and mental health practitioners suggest lower receipt of services for Blacks in general, but also for Blacks of higher education. However more research is needed to fully understand these patterns.

A third implication concerns prior services use. As with our findings for education, research on the use of mental health services has always reported that with prior use of mental health services, current services use increases. We did find this pattern for Whites, but not for Blacks. Previous research suggests several reasons this pattern may be present. One concerns the quality of care and experiences with help received. Research suggests that Blacks receive a lower quality of care when using mental health services (Snowden, Catalano, & Shumway, 2009) and report unpleasant experiences and unfavorable attitudes after receiving care (Diala et al., 2000). These findings strongly suggest that prior services use would result in less current use among Blacks, just as we found. This means that practitioners need to take care in making sure to address the concerns of Black clients in a culturally sensitive and appropriate manner. Exit interviews of premature terminators may also assist in gaining knowledge about what is appropriate and what “didn’t work.”

More studies are needed into this area of research. There are several patterns that demand replication. In addition, research is needed to examine the treatment encounter to help in understanding the negative outcomes many Blacks report when receiving treatment. It would be better for individuals with a need for mental health services to want to seek help instead of the case being that those with prior use are less likely to return for care. Also, future research should seek to replicate this research both with a more representative sample as is used here, but with better measurement of services use. Only then can we be certain about the suggestive patterns of mediation and moderation found in this research.

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