Santa Clara University Scholar Commons

Psychology

College of Arts & Sciences

2007

Predicting the Use of Campus Counseling Services for Asian/Pacific Islander, Latino/Hispanic, and White Students: Problem Severity, Gender, and Generational Status

Kieran T. Sullivan Santa Clara University, ksullivan@scu.edu

Lucila Ramos-Sánchez

Stephanie D. McIver

Follow this and additional works at: http://scholarcommons.scu.edu/psych Part of the <u>Psychology Commons</u>

Recommended Citation

Sullivan, K. T., Ramos-Sánchez, L. and McIver, S. D. (2007), Predicting the Use of Campus Counseling Services for Asian/Pacific Islander, Latino/Hispanic, and White Students: Problem Severity, Gender, and Generational Status. Jnl of College Counseling, 10: 103-116. doi: 10.1002/j.2161-1882.2007.tb00011.x

This is the peer reviewed version of the following article: Sullivan, K. T., Ramos-Sánchez, L. and McIver, S. D. (2007), Predicting the Use of Campus Counseling Services for Asian/Pacific Islander, Latino/Hispanic, and White Students: Problem Severity, Gender, and Generational Status. Jnl of College Counseling, 10: 103-116., which has been published in final form at DOI: 10.1002/j.2161-1882.2007.tb00011.x. This article may be used for non-commercial purposes in accordance With Wiley Terms and Conditions for self-archiving

This Article is brought to you for free and open access by the College of Arts & Sciences at Scholar Commons. It has been accepted for inclusion in Psychology by an authorized administrator of Scholar Commons. For more information, please contact rscroggin@scu.edu.

Running head: PREDICTING COUNSELING CENTER USE

Predicting the Use of Campus Counseling Services for Asians, Latinos, and Whites: Problem Severity, Gender, and Generational Status Kieran T. Sullivan and Lucila Ramos-Sánchez Santa Clara University Stephanie D. McIver Stanford University Medical Center

Kieran Sullivan, Department of Psychology, Santa Clara University, Santa Clara, CA, Lucila Ramos-Sanchez, Department of Counseling Psychology, Santa Clara University, Santa Clara, CA, Stephanie McIver, Stanford University Medical Center, Palo Alto, CA. Correspondance concerning this article should be addressed to Kieran Sullivan, Department of Psychology, Santa Clara University, 500 El Camino Real, Santa Clara, CA, 95053 (e-mail: ksullivan@scu.edu)

Abstract

The purpose of the current study was to identify predictors of counseling center use among Asian, Latino/a, and White college students. Findings indicated that females and second generation students report the most severe difficulties. Problem severity and gender predicted counseling center use for White and Asian students, whereas only problem severity predicted use for Latino students. Generational status was not a significant predictor of use for any group. Predicting the Use of Campus Counseling Services

for Asians, Latinos, and Whites: Problem Severity, Gender, and Generational Status

The underutilization of mental health services by people of color has been clearly demonstrated by over three decades of research (e.g., Abramowitz & Murray, 1983; Diala, Muntaner, Walrath, Nickerson, LaVeist, & Leaf, 2000; Leong, Wagnar, & Tata, 1995; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999). Comparative studies have indicated that a persistent pattern of underutilization has been shown for Asian Americans in community samples (Bui & Takeuchi, 1992; Zhang, Snowden, & Sue, 1998) and studies of college students have demonstrated that Asian students are less willing to access psychological services compared to Whites (Arnemann, 1996; Mau & Jebson, 1989; Narikiyo & Kameoka, 1992; Suan & Tyler, 1990; Sue & Sue, 1974). There is also evidence that Latinos underutilize services compared to Whites in community (McMiller & Weisz, 1996) and college samples (Sanchez & King, 1986). These findings have prompted researchers to evaluate why people of color have comparatively underutilized services.

In one of the most comprehensive review of reasons for underutilization Leong et al. (1995) reported that for both Asian Americans and Latinos, acculturation, lack of culturally appropriate treatment approaches, and institutional barriers were factors that contributed to under use of services. Other factors included keeping personal information within the family and avoiding the stigma associated with seeking counseling. Of those who did utilize mental health services, many did not return after the initial visit (Cheung & Snowden, 1990). This suggests that for both groups, cultural factors may have predisposed them not to seek services and that when group members did seek services they may have encountered obstacles to treatment.

Although the reasons for underutilization were compelling, some studies (Atkinson, Jennings, & Liongson, 1990; Johnson-Browne, 2002) have produced inconsistent results with regard to underutilization. Neither, Atkinson et al. (1990) nor Johnson-Browne (2002) found differences in use of services in comparing across a college ethnic sample. The divergent findings may have been a function of the comparison groups used in the study. Thus, when people of color were compared with a White sample there was a trend toward underutilization, however, when ethnic groups were compared with each other, few differences were found. A change in methodology from between-group to within-group differences may have also accounted for the mixed results.

Studies using within-group designs (Atkinson, Lowe, & Matthews, 1995; Sue & Kirk, 1975; Tracey, Leong, & Glidden, 1986) have found that Asian students were more willing to seek services for academic than for personal or emotional difficulties. Among Latinos, community studies (Vega et al. 1999) have found utilization differences based on immigrant and U.S.-born individuals. Recent immigrants were less likely to use services than U.S.-born Latinos. In addition, other within-group studies have begun to identify variables that are related to use of counseling services in students of color, including symptom severity (Constantine, Wilton & Caldwell, 2003), gender (Atkinson, et al., 1990), and generational status (Chang & Chang, 2004; Shibzaki, 1999; Zhang & Dixon, 2003). The latter three were of interest in the current study.

As these studies highlight, comparative studies, while critical in illuminating the problem of underutilization of counseling services among people of color, are limited in helping us understand the variables which predict help seeking in people of color. Identifying within-group factors related to utilization would make a significant contribution the research in understanding the range of diversity that exists within ethnic groups. Another important limitation in past research is that attitudes toward help seeking, rather than actual help-seeking behavior, were typically assessed (e.g., Atkinson & Gim, 1989; Atkinson et al., 1995; Gim, Atkinson, & Whitely, 1990)

The purpose of the current study was to predict use of counseling services in students of color and white students. While we did examine between-group differences in utilization and other predictor variables, the primary purpose of the study was to determine the extent to which within-group variables such as problem severity, gender, and generational status could account for use of counseling services in various ethnic groups on campus. Based on the characteristic of the college population, Asian, Latino/a, and White students were studied. Furthermore, we wanted to determine whether gender and generational status were related to problem severity within each group. Examining factors within groups that predict use of psychological services and problem severity could have implications for interventions targeted at increasing utilization.

Problem Severity

While there is evidence to suggest that ethnic minority group members experience higher rates or more severe psychological symptomatology compared to their White counterparts, most of the studies have used community-based samples (Durvasula & Sue, 1996; Schwabe & Kodras, 2000; Williams & Harris-Reid, 1999; Vega & Rumbaut, 1991). Factors that account for high rates of psychological problems in community samples, however, seem likely to occur in college students as well, including over-representation in lower socioeconomic strata (e.g., Atkinson, 2004; Sue and Sue, 1999) and marginalization (e.g., Clark, Anderson, Clark, and Williams, 1999; Falicov, 1998).

Findings from two studies that have assessed symptom severity in college students were consistent with those obtained from community-based studies. Lam, Pepper, and Ryabchenko (2004) reported Asian-American students had more severe symptoms than Whites, though they may have been willing to report more academic/vocational problems than emotional/personal problems (Tracey, et al., 1986). Latino students have been found to report higher levels of psychological distress compared to Black students (Constantine et al., 2003). In the current study the severity of psychological symptoms and college-related problems, referred to collectively as "problem severity" was assessed.

Gender

The bulk of evidence suggests that female college students are more willing to access services than males (Atkinson et al., 1990), though contradictory evidence does exist. Studies of Asian students have found that women were more willing to use psychological services (Arnemann, 1996; Gim et al., 1990; Komiya, Good, & Sherrod, 2000; Tata & Leong, 1994). Other findings with Asian students were equivocal (Chang and Chang, 2004) and at least two studies have reported no gender differences in willingness to see a counselor (Atkinson & Gim, 1989; Atkinson et al., 1995). Though no evidence on gender and utilization has been reported specifically for Latino college students, there was evidence that Latino males report fewer psychological or academic problems compared to Latina females (Shibazaki, 1999). Lower severity of problems has been reported for male Asian students compared to female Asian students as well (Tracey et al., 1986).

Generational Status

One commonly offered explanation for the underutilization of psychological services by ethnic minority group members has been the disconnect between cultural values and the values represented by counselors and treatments in the mental health arena (Atkinson et al., 1995; Bui & Takeuchi, 1992; Snowden & Cheng, 1990). Consistent with this supposition, Asian-American students have been found to be less willing to seek help when they are less acculturated to the host culture (Arnemann, 1996; Atkinson & Gim, 1989; Tata & Leong, 1994). The findings regarding acculturation have not been consistent, however. At least one study found no effect for acculturation (Atkinson et al., 1995) and other evidence has suggested the opposite effect; that is, more acculturated students were less willing to seek help and had less severe problems (e.g., depression, anxiety, and academic problems; Gim et al., 1990; Shibzaki, 1999). To our knowledge, no acculturation measure exists that has adequate psychometric properties for use with a variety of ethnic groups. However, a related variable that may help shed light on these contradictory findings is generational status. Two recent studies have examined Asian international students' attitudes toward use of counseling services; Zhang & Dixon (2003) found that level of acculturation predicted use, with more acculturated students being more open to using psychological services. Chang & Chang (2004) found differences that international students had more favorable attitudes towards psychological help compared to Asian-American students. The current study seeks to extend these findings by assessing generational status across three generations for students of color and White students.

Hypotheses

Between-group differences

Ethnic group differences. Based on previous research, we hypothesized that Asian and Latino students would use counseling services significantly less than White students.

Relationships among the predictor variables. Again, based on previous research, we hypothesized differences in problem severity based on ethnicity and gender, such that Asian and Latino students would report higher levels of problem severity compared to White students and female students would report higher levels of symptom severity compared to male students. Due

to a dearth of previous studies, we could make no specific predictions of differences in problem severity based on generational status.

Within-group differences. We hypothesized that students with more severe problems and female students would use services more within each ethnic group. The restricted number of studies on generational status and past contradictory findings on acculturation make our findings regarding the association between generational status and use of services exploratory. However, based on the two recent studies cited above, we tentatively hypothesized that international and first generation students would report using services more often than second and third generation students, and this would be pronounced among Asian and Latino students.

Method

Participants

Ethnic minority graduate and undergraduate students from a private university in Northern California were surveyed regarding their use of counseling center services and problem severity.¹ Three thousand ninety-nine packets were sent to all students who responded to any ethnicity category other than Caucasian on admissions documents during the first week of the winter quarter. Of these, 1328 packets (43%) were returned by the end of the quarter. Some surveys were excluded from analyses due to lack of ethnic identification (N = 42; 3% of respondents), self-identification as Caucasian only (N = 52; 4% of respondents), and incomplete data (N = 8; .6% of respondents). The ethnic breakdown of respondents is as follows: Asian/Pacific Islander (N = 743; 63% of respondents), African-American (N = 68; 6% of respondents), Latino/Hispanic (N = 300; 26% of respondents), and Native American (N = 2; .01% of respondents). These percentages reflect the population characteristics of the university (i.e., 52% White, 27% Asian, 2% African-American, 11% Latino, and >1% Native American). Not surprisingly, given these population characteristics, participants identifying as African American and Native American had to be dropped from the analyses due to inadequate sample size. The final number of surveys used for the following analyses was 1139 (86% of the returned surveys).

During the first week of the winter quarter of the following year, another 3099 packets were sent to a proportionate number of Caucasian students.² A registrar's data sort was conducted to randomly sample an equal number of Caucasian students across undergraduate and graduate categories. Of this sample, 1264 packets (41%) were returned by the end of the quarter. Of these surveys, four were dropped because respondents self-identified as students of color. *Questionnaire*

The questionnaire included demographic items, items assessing participants' use of counseling services, and a rating scale of psychological symptoms and college-related problems. The demographic component assessed participants' gender, age, marital status, ethnicity, generational status and current class year. Age, marital status and specific ethnicity were fill-in items. Generational status was assessed by asking students to "please identify for each of the following whether the person was born in the U.S. or outside the U.S." for self, mother, father, and maternal and paternal grandparents. Students born outside the U.S. were coded as "international/first generation," students born in the U.S. whose parents and grandparents were not were coded as "second generation," and students with at least one parent born in the U.S. were coded as "third generation." Students identified class year using a checklist (i.e., freshmen, sophomore, junior, senior, or graduate student). Utilization was assessed by asking students to identify which, if any, campus counseling services they had used before by placing a checkmark next to the appropriate service. Types of services included individual counseling, group counseling, crisis services, drop-in relaxation sessions, workshops, and phone consultation.

Across samples, 325 (15%) students reported using at least one type of service; of those, 73% reported using individual counseling. For the purposes of the current analyses, utilization was employed as a nominal variable. Students who reported using one or more counseling services were categorized as having used services.

The presence and severity of psychological symptoms was assessed using a rating scale used by this and other regional campus counseling services. Participants were asked to rate items on a scale of 1 ("experienced very little while at college") to 5 ("experienced a lot while at college"), or with a 0 if they had not experienced the item at all. The content validity of the scale was assessed by three psychologists and a small number of modifications were made to insure that the scale included items that represented each of the major symptoms for six DSM-IV disorders likely to be found in a college population (depression, anxiety, psychosis, anorexia, bulimia, and relationship problems). The original scale also included questions about loneliness, sexual problems, and academic difficulties. The final version of the scale had 64-items. Cronbach's alpha for the full scale in the current study was .96. Cronbach's alpha for each subscale and examples of items follow: depression (e.g., depressed, change in appetite; alpha = .91), anxiety (e.g., often worried, pounding heart; alpha = .89), psychotic symptoms (e.g., hearing voices; alpha= .71), loneliness (e.g., loneliness, don't fit in; alpha = .88), sexual problems (e.g., unwanted sexual activity; alpha = .73), eating problems (a subscale that combined symptoms for both eating disorders; e.g., fear of gaining weight; alpha = .65), college-related problems (academic difficulties, alpha = .80), and relationship problems (e.g., conflicts with roommate, conflicts with family; alpha = .53).

Procedure

Identified participants were sent a packet that included a cover letter, the survey (onepage double-sided), two one-dollar bills, and a certificate to be entered into a drawing for one of three \$100 gift certificates to local vendors and one tuition remission for the undergraduate summer program. The cover letter contained an explanation of the study, a request for participation, and a description of the various incentives. The letter also explained that students' responses would remain anonymous and confidential. Previous research has shown that small monetary incentives and drawings increase response rates (for reviews see Yammarino, Skinner, & Childers, 1991 and Yu & Cooper, 1983). To preserve the anonymity of respondents, coupons for the drawing requested only the phone number and a code name (or first name, if the respondent preferred). In addition, for the ethnic minority students, the letter explained that survey responses might be used to assist in the reorganization of the student resource center, an important campus resource for ethnic students.

Results

Preliminary Analyses

Prior to conducting the main analyses, preliminary analyses were conducted to determine 1) whether the participants in the three ethnic groups differed demographically or in the use of counseling services and 2) if there were any differences among the predictor variables.

Ethnic Group Differences

A univariate analysis of variance revealed a significant between-group difference in age. Tukey post hoc analyses revealed that Latino/a students (M = 21.9) were significantly younger compared to Asians (M = 24.9) and Whites (M = 25.9), p < .001. Due to this difference, age was controlled for in subsequent analyses involving all three ethnic groups. A series of *chi-square* tests were conducted to determine whether there were any between-group differences in gender, generational status, or use of counseling services. No significant differences were found for gender; 58% of White students, 57% of Asian students, and 59% of Latina students were female, $\chi 2=.27$, p = .87. As expected, significant differences were found for generational status; the percentage of students falling in the first generation/international, second generation, and third generation categories varied among White (7%, 2%, and 91%, respectively), Asian students (55%, 23%, and 22%, respectively), and Latino (14%, 55%, 31%, respectively), $\chi 2= 1036.74$, p < .001. No significant differences were found for use of services; 14% of White students, 11% of Asian/Pacific Islander students, and 16% of Latino/Hispanic students reported using counseling center services, $\chi 2= 4.81$, p = .09.

Relationships Among Predictor Variables

A 2 x 3 x 3 (Gender x Ethnicity x Generational Status) multivariate analysis of variance (MANOVA) was run, with age as a covariate, to determine whether problem severity varied based on gender, ethnicity, or generational status. Main effects and interaction effects were tested on the nine dependent variables (the eight subscales and an overall score). Significant main effects were found for age (Wilks' Lambda = .84), *F* (8, 1980) = 47.96, *p* < .001; gender (Wilks' Lambda = .95), *F* (8, 1980) = 16.71, *p* < .001; and generational status (Wilks' Lambda = .98), *F* (16, 3960) = 2.51, *p* < .001. No main effect was found for ethnicity (Wilks' Lambda = .99), *F* (16, 3962) = 1.17, *p* = .28. A significant gender by generational status interaction effect was also found for one of the subscales (eating problems; Wilks' Lambda = .97), *F* (18, 4344) = 2.13, *p* < .01. No other interaction effects were significant.

Gender. Female students reported higher severity of problems overall and significantly higher severity of problems on six of the eight subscales (depression, anxiety, loneliness,

relationship problems, eating problems, and college-related problems). For eating problems, this main effect must be interpreted in light of the interaction between gender and generational status (see below).

Generational status. Generational status significantly affected the severity of students' problems (see Table 1). Second generation students reported the most severe problems in every category except for psychotic symptoms (for which there were no between-group differences). International/first generation students reported significantly less severe depression, relationship problems, eating problems and college-related problems compared to the other two groups. Third generation students reported less severe depression, relationship problems, and college problems compared to second generation students but more severe problems compared to international/first generation students.

Gender by Generational status. Tukey post hoc tests revealed a significant gender by generational status interaction for eating problems. Though in all cases females reported higher levels of eating problems compared to males, the discrepancy increased as the number of generations born in the U.S. increased. Third generation students reported higher gender discrepancies ($M_{diff} = 2.2$) compared to second generation students ($M_{diff} = 1.7$), who reported higher discrepancies compared to international/first generation students ($M_{diff} = .9$), thus third generation females were most likely to report eating problems compared to all other groups.

Counseling Center Use

Forward stepwise regression was used to determine the magnitude with which the predictor variables (gender, generational status, and overall severity of problems) would predict counseling center use. Analyses were run separately for each ethnic group due to the significant between-group differences in generational status (see Table 2). Collinearity diagnostics were run

and no problems with collinearity were detected (tolerance statistics ranged from .96 to .99 across all analyses). For all three groups problem severity entered first, indicating that the likelihood of using services almost doubled with an increase of one standard deviation in problem severity. The amount of variance in counseling center use explained by problem severity in Step 1 ranged from 5% - 10% ($R^2 = .07$, .10, .05 for Whites, Asians, and Latinos, respectively). For Whites and Asians, gender was also a significant predictor of use of services, with White females about twice as likely to have used services compared to White males and Asian females almost three times as likely to have used services as Asian males. The increase in the amount of variance in counseling center use explained when gender is added (Step 2) was 3% for Whites and Asians ($R^2 = .09$ for Whites and .13 for Asians). Generational status was not a significant predictor of counseling center use for any of the student groups. There was no increase in the amount of variance accounted for in Step 3 for Whites, though the amount of variance did increase 1% for Asians and 2% for Latinos. There were no significant interactions among the predictor variables for any of the groups.

Discussion

Predicting Utilization

Between-Group Differences. No significant differences in use of services were found between Asian Americans, Latinos, and Whites in the current study. This apparent inconsistency with previous research may be due to the fact that most previous work assessed willingness to use services rather than actual use (e.g., Chang & Chang, 2004). There have been two recent studies that report results similar to our own when examining actual use of counseling services (Atkinson et al., 1990; Johnson-Browne, 2002). Thus, it may be important to assess behavior, rather than attitudes, in understanding utilization between ethnic groups. *Within-Group Differences.* Problem severity was a significant predictor of use of services within all three groups and accounted for 5% - 10% of the variance in use of services. Those with relatively severe problems were twice as likely to use services compared to those with less severe problems. These results are reassuring because it appears that students who most need counseling services are most likely to use them, regardless of group membership.

Unfortunately, the same did not hold true when looking at generational status, where second generation students experienced the most problems followed by third generation college students. Findings may suggest that severity of problems could be a function of cultural disparity. It is possible that the cultural disparity between second-generation college-aged students and their parents may be contributing to more psychological and college related problems, with greater differences related to more severe problems. This supports previous research that found a greater severity of problems for subsequent generations in academic achievement (**Buriel**, 1984), prevalence of illicit drug use (Vega, Alderete, Kolody, & Aguilar-Gaxiola, 1998), and psychiatric morbidity (Vega, Sribney, Aguilar-Gaxiola, & Kolody, 2004). These findings may further suggest that the relative level of cultural differences between parents and college-age children could predict degree of psychological and college-related problems. The fact that students experiencing these cultural disparities between themselves and their parents are not more likely to seek services despite their relatively serious problems suggests that they are underutilizing services.

Gender was a significant predictor of use for Whites and Asians, with females being more likely to use services than males. These findings are consistent with previous studies (Arnemann, 1996; Gim et al., 1990; Komiya et al., 2000; Tata & Leong, 1994). Interestingly, the effect of gender was stronger for Asians than for Whites (with Asian women three times more likely to use services than Asian men and White women two times more likely to use services than White men) and gender did not predict use among Latinos/as. For Asians, problem severity and gender together accounted for 13% of the variance in counseling center use and for Whites, the two variables accounted for 10% percent of the variance. The fact that females reported more severe problems than males overall, and that the comparative severity of problems did not vary across ethnic groups (i.e., there was no interaction effect between gender and ethnic group), it appears that Latinas are a vulnerable group who may be underutilizing services.

Limitations of the current study

There are several notable considerations that should be taken into account when interpreting the current findings. The use of one campus may limit the generalization of the results. The students in the current sample may not be representative of all ethnic college students, therefore, caution should be exercised when attempting to generalize these findings. Generational status is an understudied variable that is related to but not the same as acculturation. Length of time living in the United States, parenting circumstances, and marital partnership to a U.S. citizen are all factors that may contaminate generational status, thus, more clear parameters should be set in determining this variable. Moreover, additional work needs to be done to clarify the role of acculturation for this population and to explore possible implications of the current findings regarding generational status. Another potentially important variable, socioeconomic status, was not assessed in this study. Though the range of SES is probably somewhat restricted in a private college population, past research indicates clearly that SES typically varies across at least some of the predictor variables in this study (e.g., ethnicity, generational status, problem severity; for a recent, representative study, see Schwabe & Kodras, 2000). Therefore the role of SES should be examined in future work. The number of times a student accessed services was also not assessed in this study. Further work is clearly important in determining not only who

goes to counseling, but who stays in counseling over time. In addition to these theoretical limitations, two methodological issues are important to consider. First, generalizations about three major ethnic groups are made in this paper, without detailed consideration of within-group variance. It is certainly possible that ethnic sub-groups of these larger ethnic groups are different in their utilization rates and/or problem severity, which need to be taken into account in serving these populations. Second, the samples in this study were collected in adjacent school years. Though steps were taken to minimize potential error (i.e., collecting data during the same quarter), it is possible that historical conditions affected the data.

Implications for University Counseling Services

Implications for university counseling services are apparent in two broad areas: recruitment and treatment. Regarding recruitment, it appears that at least two specific student groups are experiencing relatively severe symptoms but are not relatively likely to access services. Specifically, students who are second generation Americans and Latina students appear to be underutilizing services and thus special recruitment efforts for these groups may be warranted. Second generation Americans may be a particularly challenging group because there is little information available regarding issues relating to counseling students who are second generation Americans. It is possible that second generation Americans do not realize that problems related to cultural disparity between them and their parents may underlie issues appropriate for counseling, therefore, dissemination of information regarding the scope of counseling may be necessary. Psycho-educational workshops for second generation Americans that highlight how cultural differences between them and their parents could affect their mental health could help students increase their level of awareness of the potential issues they may be facing, which in turn could lead to increased use of counseling services. Counselor training on how to assess difficulties related to parent-child culture differences may also be necessary to better serve second generation American college students once they come in for treatment.

Recruitment of students of color may require greater and more persistent efforts on the part of university counseling centers to connect with this population. Specifically, counseling centers should consider visiting student of color campus organizations in general but Latino/a organizations in particular to inform them of the range of services available. Counselors' attempts to engage students in this fashion would help establish a meaningful connection, which may be lacking with the university community (Folger, Carter, & Chase, 2004). The counseling center could offer psychologically oriented workshops to increase self-awareness and, more importantly, to have students become more familiar with counseling center staff. Previous research indicates that many people of color underutilize counseling because of their reticence to disclose personal information to a complete stranger (Leong et al., 1995). These efforts can go a long way in building a bridge between students of color and the counseling center over time.

White and Asian females are groups that are experiencing symptoms but also using services. For these groups, recruitment need not be a primary strategy for improving the usefulness of counseling centers. Rather, counseling centers can focus on optimizing treatment approaches for these groups. For example, counseling centers could conduct a needs assessment on their respective campuses to determine the frequency of problems and symptomatology. The counseling centers could use this information to establish support groups that focus on the most frequent problems experienced by these students. College counseling centers might also develop psycho-educational workshops to meet these students' particular needs.

In conclusion, the focus on utilization rather than attitudes toward counseling use contributes to our understanding of factors related to utilization among White, Asian, and Latino/a college students. Findings indicate that many students who are experiencing problems are actually utilizing psychological services. Developing psychological services to meet their specific needs may be more appropriate than recruitment. However, unique recruitment attempts may be necessary for students, second generation Americans and Latinas, who express high levels of symptomatology but underutilize counseling services. In all, developing recruitment strategies and treatment approaches to attend to the mental health of students of color should take top priority to enhance their success at a four-year university.

References

- Abramowitz, S. I. & Murray, J. (1983). Race effects in psychotherapy. In J. Murray & P.R. Abramson (Eds.), *Bias in Psychotherapy* (pp. 215-255). New York: Praeger.
- Arnemann, C.F. (1996). Help-seeking avoidance among college students as a function of ethnocultural identity. *Dissertation Abstracts International*, *56* (12), 7090B.
- Atkinson, D. R. (2004). Counseling American minorities (6th ed.). Boston: McGraw-Hill.
- Atkinson, D.R. & Gim, R.H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology*, *36*, 209-212.
- Atkinson, D. R., Jennings, R. G., & Liongson, L. (1990). Minority students' reasons for not seeking counseling and suggestions for improving services. *Journal of College Development*, 31, 342-350.
- Atkinson, D.R., Lowe, S., & Matthews, L. (1995). Asian-American acculturation, gender, and willingness to seek counseling. *Journal of Multicultural Counseling and Development*, 23, 130-138.
- Bui, K. T., & Takeuchi, D. T. (1992). Ethnic minority adolescents and the use of community mental health care services. *American Journal of Community Psychology*, 20, 403-417.
- Buriel, R. (1984). Integration with traditional Mexican-American culture and sociocultural adjustment. In J. L. Martinez Jr. & R. H. Mendoza (Eds.), *Chicano Psychology*, (pp. 95-130). Orlando, FL: Academic Press, Inc.
- Chang, T. & Chang, R. (2004). Counseling and the internet: Asian American and Asian international college students' attitudes toward professional psychological help. *Journal of College Counseling*, 7, 140-149.

- Cheung, F. K., & Snowden, L. R. (1990). Community mental health and ethnic minority populations. *Community Mental Health Journal*, *26*, 277-291.
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychological model. *American Psychologist*, *54*, 805-816.
- Constantine, M. G., Wilton, L., & Caldwell, L.D. (2003). The role of social support in moderating the relationship between psychological distress and willingness to seek

psychological help among Black and Latino students. Journal of College Counseling, 6, 155-165.

- Diala, C., Muntaner, C., Walrath, C., Nickerson, N. J., LaVeist, T. A., & Leaf, P. J. (2000). Racial differences in attitudes toward professional mental health care and in the use of services. *American Journal of Orthopsychiatry*, 70, 455-464.
- Durvasula, R. & Stanley, S. (1998). Severity of Disturbance Among Asian American Outpatients. *Cultural Diversity and Mental Health*, 2, 43-51
- Falicov, C. J. (1998). Latino families in therapy: A guide to multicultural practice. New York, NY: The Guildford Press.
- Folger, W. A., Carter, J. A., & Chase, P. B. (2004). Supporting first generation college freshman with small group intervention. *College of Student Journal*, *38*, 472-475.
- Gim, R.H., Atkinson, D.R., & Whitely, S. (1990). Asian-American acculturation, severity of concerns, and willingness to see a counselor. *Journal of Counseling Psychology*, 37, 281-285.
- Johnson-Browne, D.S. (2002). Factors affecting utilization of counseling and medical services by racial-ethnic minority college students. *Dissertation Abstracts International*, 63 (3-B), 1565.

- Komiya, N., Good, G.E., & Sherrod, N.B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, 47, 138-143.
- Lam, C.Y., Pepper, C.M., and Ryabchenko, K.D. (2004). Case Identification of Mood Disorders in Asian American and Caucasian American College Students. *Psychiatric Quarterly*, 75, 361-373.
- Leong, F. T. L., Wagner, N. S., & Tata, S. P. (1995) Racial and ethnic variations in help-seeking attitudes. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *The handbook of multicultural counseling*. Thousand Oaks, CA: Sage.
- Mau, W., & Jepsen, D.A. (1989). Attitudes toward counselors and counseling processes: A comparison of Chinese and American graduate students. *Journal of Counseling and Development*, 67, 189-192.
- McMiller, W.P., & Weisz, J.R. (1996). Help-seeking preceding mental health clinic intake among African-American, Latino, and Caucasian youths. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*, 1086-1094.
- Narikiyo, T. A., & Kameoka, V. A. (1992). Attributions of mental illness and judgments about help seeking among Japanese-American and White American students. *Journal of Counseling Psychology*, 39, 363-369.
- Sanchez, A. R., & King, M. (1986). Mexican Americans' use of counseling services: Cultural and institutional factors. *Journal of College Student Personnel*, 27, 344-349.
- Schwabe, A. M., & Kodras, J. E. (2000). Race, class, and psychological distress: Contextual variations across four American communities. *Health*, *4*, 234-260.

Shibzaki, K. (1999). Ethnic identity, acculturation, perceived discrimination, and college

adjustment in Mexican-Americans. Dissertation Abstracts International, 60 (4-B), 1872.

- Snowden, L.R., & Cheung, F.K. (1990). Use of inpatient mental health services by members of ethnic minority groups. *American Psychologist, 45*, 347-355.
- Suan, L.V., & Tyler, J.D. (1990). Mental health values and preference for mental health resources of Japanese-American and Caucasian American students. *Professional Psychology: Research and Practice*, 21, 291-296.
- Sue, D.W., & Kirk, B.A. (1975). Asian-Americans: Use of counseling and psychiatric services on a college campus. *Journal of Counseling Psychology*, 22, 84-86.
- Sue, D. W., & Sue, D. (1999). Counseling the culturally different: Theory and practice (3rd Ed.).
 New York: John Wiley & Sons, Inc.
- Sue, S., & Sue, D. W. (1974). MMPI comparisons between Asian-American and non-Asian students utilizing a student health psychiatric clinic. *Journal of Counseling Psychology*, 21, 423-427.
- Tata, S.P., & Leong, F.T.L. (1994). Individualism-collectivism, social-network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese Americans. *Journal of Counseling Psychology*, 33, 331-336.
- Tracey, T. J., Leong, F. T., & Glidden, C. (1986). Help seeking and problem perception among Asian Americans. *Journal of Counseling Psychology*, *33*, 331-336.
- Vega, W. A., Alderete, E., Kolody, B., & Aguilar-Gaxiola, S. (1998). Illicit drug use among Mexicans and Mexican Americans in California: The effects of gender and acculturation. *Addiction*, 93, 1839-1850.

- Vega, W., Kolody, B., Aguilar-Gaxiola, S., & Catalano, R. (1999). Gaps in service utilization by Mexican Americans with mental health problems. *American Journal of Psychiatry*, 156, 928-934.
- Vega, W. A., & Rumbaut, R. G. (1991). Ethnic minorities and mental health. Annual Reviews Sociology, 17, 351-383.
- Vega, W. A., Sribney, Aguilar-Gaxiola, S., & Kolody, B. (2004). Monthly prevalence of DSM-III-R psychiatric disorders among Mexican Americans: Nativity, social assimilation and age determinants. *The Journal of Nervous and Mental Disease*, 8, 532-541.
- Williams, D. R., & Harris-Reid, M. (1999). Race and mental health: Emerging patterns and promising approaches. In A.V. Horwitz & T.L. Scheid (Eds), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 295-314). New York, NY: Cambridge University Press.
- Yammarino, F.J., Skinner, S.J., & Childers, T.L. (1991). Understanding mail survey response behavior: A meta-analysis. *Public Opinion Quarterly*, 55, 613-639.
- Yu, J., & Cooper, H. (1983). A quantitative review of research design effects on response rates to questionnaires. *Journal of Marketing Research*, 20, 36-44.
- Zhang, A.Y., Snowden, L.R., & Sue, S. (1998). Differences between Asian and White Americans' help seeking and utilization patterns in the Los Angeles area. *Journal of Community Psychology*, 26, 317-326.
- Zhang, N. & Dixon, D.N. (2003). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural Counseling and Development*, 31, 205-222.

Footnotes

¹There are little to no studies in the utilization literature examining specific problems/diagnoses across ethnic groups therefore all our hypotheses are based on the problem severity total. Exploratory analyses of specific problems are presented in the Results section.

²Data were not collected in the same year due to limitations in resources and the greater need for information regarding students of color. When additional resources became available, data collection for Whites was planned for the same quarter in an attempt to minimize error related to different data collection times.

Table 1

		International/	Second	Third		
Factors		First Generation	Generation	Generation	F	
Depression	М	16.3a	21.0b	18.8c	7.31	***
	SD	12.3	12.4	12.2		
Anxiety	М	16.2a	20.6b	16.9a	5.74	**
	SD	13.6	14.6	12.3		
Psychotic Symptoms	М	1.4a	1.9a	1.4a	1.41	
	SD	2.8	3.4	2.7		
Loneliness	М	5.7a	7.8b	6.6a	8.10	***
	SD	4.9	5.4	5.3		
Sex Problems	М	1.3a	2.0b	1.6b	3.06	*
	SD	2.2	2.8	2.7		
Relationship Problems	М	2.8a	4.0b	3.7c	8.42	***
	SD	3.0	3.6	3.2		
Eating Problems	М	2.0a	2.8b	2.6b	7.25	***
	SD	2.3	2.7	2.7		
College-Related Problems	М	7.9a	11.2b	10c	16.05	***
	SD	5.8	6.2	6.0		
Overall Problems Severity	М	60.6a	80.9b	69.8c	10.21	***
·	SD	43.6	46.5	42.4		

Mean Ratings of Severity for Immigrant Generation Status

Note. Means having the same subscript are not significantly different at p < .05

*p < .05; **p < .01; ***p < .001

Table 2

	White Students			Asian/P	Asian/Pacific Islander Students				Latino/Hispanic Students			
Predictor	В	SE B	Exp(B)	R^2	В	SE B	Exp(B)	R^2	В	SE B	Exp(B)	R^2
Step 1												
Problem Severity ^a	.64 **	.09	1.89	0.07	0.76 **	0.13	2.14	0.10	0.58 *	0.19	1.79	0.05
Step 2												
Problem Severity	.59 **	.09	1.81		0.66 **	0.14	1.94		0.52	0.19	1.70	
Gender ^b	.71 **	.19	2.03	0.09	1.05 **	0.31	2.86	0.13	0.53	0.36	1.70	0.07
Step 3												
Problem Severity	.59 **	.09	1.81		0.69 **	0.14	2.00		0.54 *	0.20	1.71	
Gender ^b	0.70 **	0.19	2.02		1.06 **	0.31	2.89		0.51	0.37	1.66	
Acculturation ^c	0.18	0.52	0.84	0.09	0.39	0.36	1.47	0.14	0.20	0.62	0.82	0.09

Summary of Forward Stepwise Regression Analysis for Variables Predicting Use of Counseling Center Services

^aContinuous scores recoded as follows: 1 = below one SD, 2 = -1 SD to M, 3 = M to +1 SD, 4 = above one SD.

^bEstimates for females, in reference to males

^cEstimates in reference to international/first generation students

*p < .01; **p < .001