

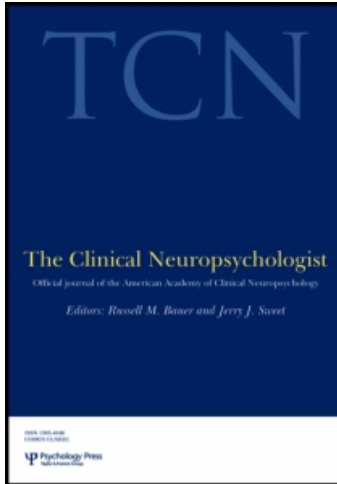
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Diversity Summit 2008: Challenges in the Recruitment and Retention of Ethnic Minorities in Neuropsychology

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CE DIVERSITY SUMMIT 2008: CHALLENGES IN THE RECRUITMENT AND RETENTION OF ETHNIC MINORITIES IN NEUROPSYCHOLOGY

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The 2008 Diversity Summit recognized the many advantages of increasing the number of neuropsychologists from ethnically diverse backgrounds. The Summit addressed the aspiration of creating a more ethnically diverse body of neuropsychologists by increasing the recruitment of ethnic minority students to neuropsychology training programs. Challenges to successful recruitment and retention of ethnic minority students were discussion points at the Summit. This paper summarizes and expands these points and also suggests solutions to these challenges with the aim of stimulating innovative approaches to increasing the representation of ethnic minorities in neuropsychology.

Keywords: Recruitment; Ethnic Minority; Neuropsychology training.

INTRODUCTION

The 2008 Multicultural Problem Solving Summit drew together neuropsychologists of various backgrounds and areas of expertise to address the challenges of assessing ethnic minorities. For a full description of the formation and content of the summit, please consult the published proceedings (Romero et al., 2009). For the purposes of the summit and this paper, ethnic minorities include individuals belonging to a group presently considered a minority in the United States, whether defined by race, culture, or language, such as Native American/Alaska Native, Asian American/Pacific Islander, Black/African American, or Hispanic/Latino. Similarly, the terms “cross-cultural” and “multicultural” are used in this paper to describe those cultural factors (i.e., ethnic identity, bilingualism) that contribute to

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the experiences of and account for performance differences of individuals from these minority groups.

The need to increase the body of professionals who are ethnically and linguistically diverse was clearly recognized at the summit. Multiple benefits to diversification were highlighted, including the ethnically diverse individuals serve as mentors and role models to prospective students and junior professionals from similar ethnic backgrounds (Maton & Hrabowski, 2004; Rogers & Molina, 2006). Ethnic minority clinicians/researchers with the requisite cultural-linguistic expertise also bring new perspectives to theory development and clinical application, in addition to personal insight to culture-related factors that may impact assessment (Maton, Kohout, Wicharski, Leary, & Vinokurov, 2006; Sue, Bingham, Porche-Burke, & Vasquez, 1999). Furthermore there is a continuing disparity between the growing numbers of ethnic minority clients and the availability of multicultural and multilingual neuropsychologists. While we recognize that non-minority neuropsychologists are capable of providing culturally and linguistically competent services to clients, there are valuable benefits that emerge from the presence of minority neuropsychologists, including unique cultural-linguistic expertise and perspectives available to address the challenges posed by multiculturalism. We also recognize that ethnic identification alone does not guarantee the cultural and/or linguistic knowledge or sensitivity that is required to render culturally competent services to clients. Nonetheless, the goal of this paper, and the corresponding portions of the Summit upon which it is based, is to increase the recruitment and retention of ethnic minority students.

Currently, there are no standardized mechanisms for tracking the ethnic background of trainees or professionals in neuropsychology. However, available statistics from the American Psychological Association (APA) reflect consistent under-representation of ethnic minorities in the field relative to national census data. Data provided by Maton et al. (2006), based on the re-analyses of APA and National Science Foundation surveys, suggest that, in 2003, 14.8% of psychology Ph.D. recipients were minorities. They correctly highlight that this percentage is less than half of the U.S. population of minorities, which in 2003 was 32.2%. More specific to neuropsychology, a comparison of 4 years of Division 40 membership data (2002–2006) on race and ethnicity suggests that the proportion of members who chose to respond to questions of race/ethnicity and who reported belonging to an ethnic minority group has remained consistent at around 6.5%, showing no growth during that four year period (American Psychological Association, 2006). An informal survey, conducted by the authors of this manuscript, of Directors of Clinical Training at five prominent neuropsychology graduate training programs demonstrates that an average of 18% of neuropsychology training cohorts over the past 5 years were ethnic minority. A similar survey conducted by the authors of Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN) post-doctoral programs indicated that, in 2008, 19% of neuropsychology post-doctoral fellows identify as ethnic minority. The discrepancy between the APA Division 40 membership data and our surveys may be due in part to reporting biases (e.g., not all neuropsychologists are APA members, join Division 40, or report their ethnicity, etc.) or selection bias (e.g., the five neuropsychology doctoral programs and APPCN affiliated post-doctoral programs may not be representative of all training

programs). Nonetheless, these estimates, which seem to suggest some recent improvement, continue to reflect the under-representation of ethnic minorities in the field particularly in light of the fact that minorities are projected to constitute half the U.S. population by 2040 (United States Census Bureau, 1996). Therefore the goal of culturally diversifying neuropsychology must begin with increasing the number of ethnic minority students in graduate training programs.

This paper summarizes and expands the discussion of the challenges to ethnic minority student recruitment at the 2008 Diversity Summit. Relevant presentations during the Directions for Education, Training, and Public Awareness session of the Summit focused on obstacles and solutions to the recruitment and retention of ethnic minority neuropsychologists, followed by informative discussion about specific graduate school recruitment strategies, the role of APA's diversity guidelines in neuropsychological training and mechanisms for financial and social support of minority graduate students. Student perspectives during this portion of the Summit were revealing and highlighted the need for faculty who were competent in cross-cultural neuropsychological practice and research and institutional mechanisms through which students could provide open feedback regarding diversity training (Romero et al., 2009). The current paper summarizes these points, and furthers the discussion by suggesting solutions to the recruitment/retention challenges with the ultimate aim of stimulating innovative approaches to increasing the representation of ethnic minorities in neuropsychology.

SPECIFIC CHALLENGES TO EFFECTIVE ETHNIC MINORITY RECRUITMENT

Many challenges complicate the successful recruitment and retention of ethnic minority students to neuropsychology training programs. These challenges range from obstacles inherent in the general process of graduate school admission to specific admission policies at individual universities, and will certainly vary for individual ethnic minority applicants. Not all of the recruitment challenges are unique to neuropsychology but may preferentially impact the discipline due to the small sizes of neuropsychology training classes and that many neuropsychology training programs are housed within highly competitive clinical psychology programs that adhere to the scientist-practitioner model of training. These programs attract exceptionally large numbers of applicants and often require more extensive research training and sophistication than other clinical programs, which can serve as a hindrance to minority students lacking research experience and proper mentorship prior to applying for admission.

One of the primary challenges to the recruitment of ethnic minority trainees is limited opportunities for exposure to the discipline and to ethnic minority neuropsychologists. As a relatively small specialty of psychology, neuropsychology does not share the prominence and visibility of other specialties like child, counseling, and community psychology. As such, many undergraduate students, especially those at institutions without neuropsychology faculty, are unaware of neuropsychology as a graduate training option. Courses such as Introduction to Psychology and Physiological Psychology do not have automated mechanisms for formal introduction to neuropsychology as an independent discipline and graduate training option. Many students complete these courses and develop interest in

brain-behavior relationships without realization that the discipline of neuropsychology exists. Further, most psychology departments do not yet offer neuropsychology as an advanced topics course, further limiting undergraduate exposure to the field. Research experiences offered to undergraduates may also not include neuropsychology projects if there are no neuropsychologists on the faculty. As such, many undergraduate students, including ethnic minorities, do not learn of neuropsychology until graduate school or beyond, which limits the pool of eligible and interested minority applicants to doctoral programs.

Rigid threshold scores on the Graduate Record Examinations (GRE) continue to limit the successful recruitment of ethnic minority students to neuropsychology training programs (Munoz-Dunbar & Stanton, 1999). While data on the relationship between GRE score requirements and ethnic minority admissions to doctoral programs are not available, testimonial evidence from recent student applicants to neuropsychology programs and directors of training at these programs underscore the continued limitation that GRE criteria place on ethnic minority students desiring doctorates in psychology. Many otherwise well-qualified students with excellent grade point averages, research experience, and training potential report relatively low GRE scores as the primary factor cited for non-admission. This test often serves as an impediment that can hinder otherwise qualified ethnic minority students, which is unfortunate given empirical evidence that GRE scores have limited predictive validity for graduate school success among minority students (Sampson & Boyer, 2001).

The decision to pursue a graduate degree is influenced by the financial costs. Of the 68% of psychology doctorates who reported educational debt, 35% report student loan balances in excess of \$75,000 (<http://www.apa.org/ed/graduate/cumuldebt.html>). Thus, earning a doctorate can come at a substantial financial cost, especially for ethnic minority students who are more likely to come from families with limited financial resources (United States Census, 2000). Many students cannot afford to abandon full-time employment for full-time enrollment in graduate school without adequate financial support. The absence of adequate financial assistance to help defray the costs associated with graduate study poses a major limitation to ethnic minority recruitment to psychology training programs.

Other challenges to the recruitment of ethnic minorities include lack of minority faculty mentors (Cole & Barber, 2003; Munzo-Dunbar & Stanton, 1999), and possibly the lack of access to research focused on issues pertinent to ethnic minorities. Studies have demonstrated that programs that have more minority faculty (Munzo-Dunbar & Stanton, 1999) and those that have increased research in multicultural issues (Jones, 1990) tend to attract higher numbers of minority students. These data suggest that minority students respond to role models that share specific characteristics with them and access to research that encompasses some of their experiences or ethnically similar populations.

SPECIFIC CHALLENGES TO EFFECTIVE ETHNIC MINORITY RETENTION

Once ethnic minority students are successfully recruited to neuropsychology training programs, retaining their enrollment can also be a challenge. Exact data on the number of ethnic minority students who begin, but do not complete, graduate

training programs in psychology are not available. However, data regarding ethnic minority student pipelines in psychology was obtained by Maton et al. (2006), who synthesized data from the National Science Foundation, the National Center for Education Statistics, and the American Psychological Association. These data suggest that there was an increase in minority students entering Ph.D. programs from 1989 (13.1%) to 1995 (17.6%), with no increase between 1995 and 2000 (approximately 17.5% in these years), and again a period of growth between 2000 and 2003 (17.5–22.1%). The pattern of growth for the percentage of minority students *obtaining* a Ph.D. was somewhat different. There appeared to be an increase in the number of doctorates attained by minority students between 1989 (8.0%) and 2000 (15.7%), but no increase since then (15.7%, 14.2%, 15.6%, and 14.8% for years 2000–2003, respectively; Maton et al., 2006). These data indicate that, in spite of some improvement in the recruitment of minority students into Ph.D. programs, their level of Ph.D. attainment has stalled since 2000. Additionally, the authors reported that of the ethnic minority students entering Ph.D. programs, the percentage of African American and Hispanic students specifically showed little or no growth between 1997 and 2003 (enrollment was consistently around 5–6% per group during each of those years), and that Ph.D. attainment also showed little or no growth from 2000 onward. These data suggest that recruitment of African American and Hispanic students in particular continues to be challenging.

Given the absence of empirical investigations into the sources of ethnic minority retention problems, we offer potential causes based on the personal experiences of the authors and summit participants, interactions with minority students through mentoring relationships, and discussions with training directors. Some of the observed challenges to the retention of ethnic minorities in neuropsychology include limited social support networks, mediocre didactic and experiential training in diversity issues, educational environments where diversity issues within the training program receive inadequate attention, lack of ethnic diversity among the faculty and limited research opportunities on projects relevant to minority communities. We offer details on some of these factors below.

The unavailability of social support systems contributes to low retention rates for ethnic minority students, especially in graduate programs located in remote or culturally homogenous regions of the country. Ethnic minority students who decide to attend graduate school in cities with little cultural diversity are at risk for responding adversely to the absence of familiar cultural institutions and social support networks (e.g., minority student unions, ethnic specific professional organizations, churches, etc.). The absence of these support networks limits students' opportunity to interact with members of their own cultural group. Further, these kinds of social support networks may be the only settings in which minority students feel comfortable to openly discuss the source of frustrations that may arise as a result of being an ethnic minority in a predominantly Caucasian environment (i.e., discrimination, racial micro-aggressions [intentional or unintentional brief verbal, behavioral, and environmental indignities that communicate hostile or derogatory racial slights or insults to the target person or group], etc.; Sue, Lin, Torina, Capodilupo, & Rivera, 2009). Feelings of alienation and social isolation can be powerful determinants of behavior that may result in a

premature return to their home cities and cultural settings before completing graduate school.

Another factor that can impact the retention of ethnic minority students is the quality of multicultural didactic and experiential training. Although APA accreditation requires that clinical programs provide a multicultural curriculum, there is no content standard or mechanism to gauge the quality of the course offerings. Many training programs lack the faculty experience and theoretical expertise for optimal implementation of these training expectations. This may be especially true within neuropsychology where cross-cultural research has only recently received mainstream attention (Ferraro, 2002; Heaton, Miller, Taylor, & Grant, 2004; Manly & Echemendia, 2006). Van Gorp, Myers, and Drake (2000) and Llorente, Taussig, Satz, and Perez (2000) provide information about how issues of ethnicity, culture, and stereotyping affect neuropsychological assessment, interpretations of test results, and research. Van Gorp et al. (2000) further describe the importance of including ethnocultural issues in neuropsychology curricula. When multicultural training is perceived as being poor in quality or less important than other aspects of training, ethnic minority students may conclude that the training program is not committed to developing the cultural competency of all students and not sensitive to the needs of a diverse clientele, reducing their motivation to complete the program. Moreover, previous research has found a positive association between the proportion of faculty engaged in multicultural research and minority student representation in clinical psychology doctoral programs (Munoz-Dunbar & Staton, 1999).

An additional obstacle to retention is the maintenance of an educational environment where issues related to diversity within the training program itself are not openly discussed. Many ethnic minority students want to know the departmental sexual and racial harassment policies and how best to respond to inappropriate behavior. Such discussions should involve administrators and should be incorporated into all students' orientation. Even subtle or unintentional racially offensive behaviors are experienced more often than realized, but minority students often fail to report or discuss such behaviors with faculty from fear of retaliation, being perceived as "too sensitive", or being labeled a "complainer." Neglecting these issues could lead students to harbor resentment and be left without direction on how to respond to future incidents. Ideally, graduate training programs would proactively create open environments where all students, particularly ethnic minorities, feel comfortable discussing how prejudice, racism, and sexism could be influencing their training experience. One important benefit of this kind of educational environment, for example, would be greater opportunities for non-minority students to better understand the experiences of ethnic minority clients.

Another factor that interferes with the retention of ethnic minority students is the lack of diversity among program faculty. A diverse faculty enriches the experiences of all students and can serve to facilitate the matriculation of minority students through multiple mechanisms, which include offering theoretical perspectives that resonate with their backgrounds while offering scholarly value. More importantly, these faculty members serve as role models for minority students, and

can provide insight and guidance into navigating the complexities of being an ethnic minority student in a predominately Caucasian setting.

Challenges to the recruitment and retention of ethnic minority students in neuropsychology are multifaceted. However, each of the obstacles outlined above can be overcome with innovative interventions, some of which are described below.

PROPOSED SOLUTIONS TOWARD MORE SUCCESSFUL RECRUITMENT AND RETENTION OF ETHNIC MINORITIES IN NEUROPSYCHOLOGY

The pipeline approach to student recruitment assumes that fostering early interest in the field of neuropsychology will increase the pool of minorities obtaining Bachelor's degrees, which in turn will lead to a larger pool of minority Ph.D. applicants and ultimately to more minority neuropsychologists. Further, increasing the number of minority neuropsychologists will increase the number of available practitioners and faculty who can mentor future minority trainees. Below are suggestions for enhancing the minority neuropsychology graduate student pipeline based on findings from the literature, Summit discussion, and successful practices.

Early exposure

There is great consensus in the literature that exposure to psychology and contact with minority students should begin early in the psychology pipeline. For example, neuropsychology graduate programs could coordinate with a wide range of officials and educational programs in order to reach as many minority students as early in their academic career as possible. How early is early? While some argue that exposure to the field should begin as early as high school (Dittman, 2005; Fastenau, Evans, Johnson, & Bond, 2002; Thomason, 1999), the National Academy of Neuropsychology has developed a student outreach training program that provides learning tools (e.g., slides, flashcards, lesson plans, and activities) targeted for elementary students (as young as first-graders; http://www.nandistance.org/syllabus.php?course_id=28). One example of exposure to psychology at the high school level comes from APA's Teachers of Psychology in Secondary Schools (TOPSS) project. In addition to its mission to "promote the scientific nature of introductory and advanced high school psychology," TOPSS introduces high school students to what the field has to offer ethnic minority communities, providing examples of prominent ethnic minority psychologists, and discussing how students can overcome racial barriers (Dittmann, 2005). Additionally, and perhaps most importantly, high school students considering a career in psychology are mentored by minority community college and 4-year university undergraduate students. By participating in this project or establishing a similar program, neuropsychology graduate programs can reach ethnic minorities as early as high school.

Undergraduate education

At the undergraduate level, psychology departments can be proactive by exposing minority students to neuropsychology through course offerings and

research/scholarly activities (e.g., research assistantships in neuropsychology research labs, travel to neuropsychology conferences). Although most psychology departments do not offer undergraduate neuropsychology courses, there are now a number of neuropsychology textbooks specifically geared toward undergraduates as well as recommendations on teaching an undergraduate course in neuropsychology (Puente, Matthews, Williams, & Matthews, 1991; APA Division 2's Office of Teaching Resources in Psychology: <http://teachpsych.org/otrp>). Neuropsychologists without a full-time appointment in a university setting could offer to teach such a course as an adjunct, which would also serve the purpose of helping to prepare for board certification.

Undergraduate institutions, particularly those that have been identified as minority serving institutions, can fund the scholarly activities of minority students by seeking funding from federal agencies or obtaining internal funding from their institutions. For example, the National Institute of General Medical Sciences (NIGMS) and National Institute of Mental Health (NIMH) offer grants to universities in order to provide funded fellowships to minority undergraduate students interested in biomedical and/or mental health research (e.g., Minority Access to Research Careers, Research Initiative for Scientific Enhancement, Minority Biomedical Research Support or Career Opportunities in Research). Allocating resources to provide exposure to the field early in the minority student's academic career will increase the chances that the student will develop interest and competency in the field, and become a competitive applicant for graduate programs in neuropsychology.

Doctoral program outreach

The literature indicates that creating relationships or linkages to minority serving institutions is another very effective means of recruiting ethnic minority students (Rogers & Molina, 2006). Therefore doctoral programs may benefit from putting current students and faculty (particularly those of diverse ethnic backgrounds, when available) in contact with chairs of undergraduate psychology departments, especially those at minority serving undergraduate 4-year institutions and community colleges (Rogers & Molina, 2006; Thomason, 1999). Because minority students at these institutions are less likely to have had much exposure to neuropsychology, linking them with doctoral programs in neuropsychology will likely kindle early interest in the field.

Neuropsychology graduate program officials may also enhance minority recruitment by partnering with organizations such as Psi Chi (National Honor Society in Psychology), minority student organizations, and NIH-sponsored minority undergraduate training programs such as Minority Access to Research Careers (MARC) and Career Opportunities in Research (COR). Psi Chi, for example, offers meetings and educational opportunities at national (e.g., American Psychological Association) and regional (e.g., Western Psychological Association) scientific conferences for students. Graduate programs should send representatives (students and/or faculty of diverse ethnic backgrounds, if possible) to introduce minority undergraduate students to the field of neuropsychology and describe graduate school opportunities in neuropsychology to them. Undergraduate training

programs (i.e. MARC and COR) aimed at increasing the number of ethnic minorities enrolled in graduate programs are prime targets for exposure and recruitment efforts as participants are pre-selected for academic excellence and demonstrated promise for successful research careers.

Finally, doctoral programs could more actively recruit ethnic minority students from master's programs. Masters granting institutions can support minority students with research opportunities through federally funded programs specifically designed for engaging master's level students in biomedical research (e.g., NIGMS Minority Biomedical Research Support) or by seeking internal funding. Minority students frequently attend master's programs to strengthen the skills necessary to be competitive for doctoral programs. Yet recent data from APA's Office of Ethnic Minority Affairs (2008) suggest that while recipients of master's degrees among ethnic minorities increased from 16.1% in 1995/1996 to 27.2% in 2003/2004, the rate of growth in minorities obtaining doctoral degrees is significantly lower (14.4% in 1995/1996 to 20.1% in 2003/2004). While this trend is concerning, it suggests that master's-level institutions may be a fruitful target for generating interest in neuropsychology among ethnic minority students.

Doctoral program recruitment and admissions

Specific practices and policies established by organizations, programs, and departments have demonstrated increased success in the recruitment of ethnic minorities into psychology graduate programs. The involvement of current ethnic minority graduate students and faculty in the recruitment process appears to be a key factor in successful recruitment (Munoz-Dunbar & Stanton, 1999). Rogers and Molina (2006) evaluated 11 graduate departments and programs that were considered to be making "exemplary efforts" in attracting and retaining minority students. Their findings demonstrate that actively involving minority graduate students and faculty in the recruitment process and having faculty members make personal contact with prospective students are among the most effective recruitment strategies for these institutions. A corollary finding is that an important factor in successfully recruiting minority students is the presence of ethnic minority students and faculty in the graduate program (Fastenau et al., 2002; Rogers & Molina, 2006; Stricker, 1990). Students are more likely to want to attend a graduate program in which they feel that they have peers, mentors, and role models with similar life experiences and perspectives.

Commitment to providing financial support for graduate school to ethnic minorities also produces higher recruitment rates (APA Office of Ethnic Minority Affairs, 2008; Munoz-Dunbar & Stanton, 1999; Rogers & Molina, 2006). Studies have found that providing attractive financial aid packages to prospective minority students not only alleviates a burden that most often precludes many such students from attending graduate school (Thomason, 1999), but also indicates the level of dedication and investment an institution is willing to make in the student. There are also programs that offer both financial support and professional development to minority students who are interested in APA-accredited doctoral programs, including those that offer neuropsychology training, such as the APA Minority Fellowship Program (MFP; www.apa.org/mfp). The MFP works in conjunction

with doctoral programs, helping them to both financially support and appropriately mentor minority students.

There is growing evidence that adopting flexible entrance criteria would favorably impact recruitment without adversely impacting programs. Unfortunately, some graduate programs continue to use rigid cut-off scores for admissions despite research findings that standardized test scores, such as those from the GRE, are poor predictors of graduate school success (Sternberg & Williams, 1997; Williams, 1997), and that many minority students with lower scores perform as well as non-minority students with higher GRE scores (Stricker, 1990). Rogers and Molina (2006) found that only 2 out of the 11 universities identified as making exemplary efforts in recruiting ethnic minority graduate students rated GRE scores as important admissions criteria. Fastenau et al. (2002) have argued that admissions committees at neuropsychology graduate programs need to “redefine the predictors of and potential for success in graduate school.” The programs in the Rogers and Molina (2006) study rated letters of recommendations, research or practical experience, personal statements, and student–faculty interest match as the most important entrance criteria for ethnic minorities. Indeed, identifying more accurate predictors of success in lieu of traditional criteria would likely increase ethnic minority recruitment.

One way in which a program can assure that there is consistent focus and effort for securing funding is to assign one faculty or staff member to the task of identifying and applying for such funding. The faculty/staff can explore all of the possible sources of financial assistance available for incoming minority students (i.e., federal and private funding, community resources, scholarship opportunities). This appointed individual can then be in charge of reporting the findings back to the graduate program committee for feedback, brainstorming or advice. Additionally, continuous networking with other programs ensures knowledge of existing lines of support. Cooperative efforts among neuropsychology programs to share information about available sources for funding graduate students can increase the common goal of increasing minority enrollment. Awareness of grants, such as those once offered by the APA Office of Minority Affairs (<http://www.apa.org/pi/oema/programs/cemrrat2.html>), available to faculty and institutions for supporting outreach, recruitment, and retention of ethnic minorities should also be considered. Finally, graduate programs can often tap into institutional resources committed for institutional diversity goals. Thus, department chairs or graduate program officials should petition the parent university or organization for financial assistance for funding qualified minority graduate candidates. Finally, graduate programs should announce funding opportunities to potential students by advertising them on their web pages and including links to web sites that describe specific funding opportunities available to minority students.

Organizational efforts

While the aforementioned suggestions are aimed at training programs, there is also much that neuropsychological organizations can do to enhance the recruitment and retention of ethnic minority students. For example, the Ethnic Minority Affairs subcommittee of Division 40 (Clinical Neuropsychology) of the American

Psychological Association offers several mentoring and career advancement opportunities such as a graduate school pre-application program where minority undergraduates are invited to have graduate school application materials reviewed by professionals prior to submission in order to: (1) ensure the student's readiness, (2) enhance competitiveness, and (3) direct students to programs best matched with their career goals and skill level. Another program aimed at increasing diversity in neuropsychology was recently instituted by the Cultural and Diversity Committee of the National Academy of Neuropsychology (NAN). In an effort to spark interest in the field, NAN is offering scholarships to allow 25 undergraduate students representing various forms of diversity to attend its annual conference for free. The students are recruited from 4-year universities located in the city in which the conference is being held (e.g., New York in 2008). This program also includes an introduction to the field of neuropsychology and NAN, guidance on how to make best use of the conference, and mentoring throughout the duration of the conference. Furthermore NAN is supporting presentations about neuropsychology to predominantly ethnic minority high schools in the city hosting its annual conference.

Of all possible intervention strategies, early and individualized mentoring appears to be the most effective at successful recruitment and retention of ethnic minorities in psychology. In fact Rogers and Molina (2006) found that faculty and peer mentorship were key strategies used by psychology departments identified as making exemplary efforts in the recruitment and retention of ethnic minority students. Effective mentoring bolsters a student's focus, experience, and sophistication in neuropsychology. Mentoring also serves to fill in knowledge gaps by accurately informing students of career options in the field, graduate school admissions process, financial costs, and the personal and social benefits of the science and practice of neuropsychology.

CONCLUSION

The 2008 Multicultural Problem Solving Summit asserted that there are critical advantages to fostering and supporting the growth of a more ethnically, culturally, and linguistically diverse body of neuropsychologists. The current manuscript highlights the major points discussed at the Summit surrounding the challenges associated with increasing the diversity of neuropsychologists and offers some possible solutions for the successful recruitment and retention of ethnic minority students in neuropsychology. Importantly, much of the content presented in this paper is based on the opinions and deliberations of Summit participants. The scope of the paper was then expanded, reflecting the perspectives of the authors, some of whom participated in the Summit and some who did not. The manuscript was then made available for review to all Summit participants, and then to the larger neuropsychology community by way of posting on to the EMA Division 40 listserv. In recognition of the limitations associated with a paper of this nature and the paucity of available empirical data on diversity in neuropsychology training, we encourage future research on minority recruitment and retention. In particular it is our hope that, consistent with the intent of Summit, the ideas presented herein serve

as a springboard for empirical investigations into barriers to recruitment and retention as well as the success of various intervention strategies. Systematic, confidential survey studies of persons involved in the graduate admissions process, including students who applied to graduate programs but did not gain entry, would be especially valuable to testing the proposed concepts presented here, in addition to identifying new challenges and solutions.

Given the gravity of the problem posed by the lack of diversity, innovative and creative responses are required from our neuropsychology training institutions, professionals, and organizations. Addressing the key issues that hinder recruitment and retention of qualified ethnic minority students, and using some of the recommended solutions in this manuscript, will be a positive first step toward increasing ethnic diversity in the field of neuropsychology.

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