Use of Culturally Adapted Practices among Occupational Therapy Practitioners in Work Rehabilitation Settings

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Abstract

The purpose of this study was to explore ways in which occupational therapist practitioners use culturally adapted practices when working in work rehabilitation settings. A survey was completed by 95 occupational therapy practitioners who were members of the Work and Industry Special Interest Section of the American Occupational Therapy Association for a usable response rate of 38%. The findings indicate that using certified interpreters is the most common culturally adapted practice used in this setting. Occupational therapy practitioners with formal training were more likely to use many of the culturally adapted practices in therapy than those without formal training and were more likely to respond that they understand the treatment needs of non-fluent clients. Practitioners also responded that further cultural diversity and awareness training would be most beneficial for increasing their effectiveness with this population. Further research into the experiences of foreign-born clients should be considered in the future development of cultural competency training in this setting.

Use of Culturally Adapted Practices among Occupational Therapists in Work Rehabilitation Settings

The U.S. is becoming increasingly diverse, with 12.5% of the population foreign-born and with this group growing more rapidly than the native-born population. Between 2005 and 2010, the foreign-born population increased 17% to forty million and the minority population is expected to become the majority by 2042 (U.S. Census Bureau, 2010). Immigrants hold a large percentage of the jobs with the highest rates of occupational injury. Day laborers, in particular, have injury rates 1.5 to 2 times that of non-immigrants (Schenker, 2008). Laborers and freight, stock and material movers have some of the highest injury rates of all workers, and in 2010 had the highest documented number of days-away-from-work injuries, with an incidence rate of 430 cases per 10,000 full-time workers (U.S Department of Labor, 2010). Currently, job related injuries and illness cost approximately $250 billion per year in the U.S., an estimated 70% increase since 1992 (Leigh, 2011). As workers' compensation covers only an estimated 25% of this cost, the remainder is picked up by society, becoming a larger financial burden than ever before (Leigh, 2011). Work-related injuries will continue to cost immensely in lost productivity and in compensation and medical expenses, as the working age group in the U.S. continues to grow. In addition to being at higher risk for occupational injuries in the workplace, immigrants also face greater health disparities and a tendency for chronic illness (Brach & Fraserirector, 2000; Coren, Filipetto & Weiss, 2009; Diamond & Jacobs, 2010). Occupational therapists will encounter these workers in

increasing numbers in their practice, especially those therapists in work rehabilitation settings.

The need to establish culturally competent health care practices to achieve better client outcomes and reduce existing health disparities has been recognized across all health professions (Betancourt, Green, & Carrillo, 2002). Formal tools, assessments, and standards have been developed, especially in the field of nursing, to increase client-centered care and deliver more effective service to diverse groups (Servonsky & Gibbons, 2005). According to Suarez-Balcazar et al. (2009), occupational therapists rated cultural competency as a core skill necessary to be effective in practice, and these authors emphasized a necessary expansion of training to develop these skills. Despite the growing literature on culturally competent health care providers, there is limited research on clinical application to patient care in occupational therapy. Particularly absent are studies on how occupational therapists could adapt their practice in a work rehabilitation setting to meet the needs of a more diverse population with work-related injuries.

Background

As demographics change, so does the future of healthcare. It is widely recognized that health disparities exist in the U.S. and, as a result, reducing health disparities has become a national priority (Betancourt et al., 2002). It has been shown that there is less access to rehabilitation and health services for minority ethnic groups, and when they do access treatment, there exists a high rate of missed follow-up appointments and of dropping out due to varying levels of English proficiency, lack of social support, differing experience of pain, psychosocial

stressors, and cultural beliefs about disability (Cervantes & Lechuga, 2004; Hasnain et al., 2009). Various organizations have addressed the issue of inadequate services for this population. The U.S. Department of Health and Human Services' Office of Minority Health (2001) developed the National Standards on Culturally and Linguistically Appropriate Services, which are directed at healthcare organizations and designed to ensure appropriate services are in place so that all people receive fair and effective treatment. The Joint Commission on Accreditation of Healthcare Organizations (2010) and the Institute of Medicine (2002), among others, have supported these standards to require cultural competence in healthcare and encourage cross-cultural education for health professionals.

Cultural competence. Despite this national focus, studies on health disparities are limited in the field of occupational therapy, with most literature focused on attitudes toward and knowledge about multicultural issues and less on therapists' habits and practices (Awaad, 2003; Bass-Haugen, 2009). Awareness of cross-cultural issues is supported through actions such as societal statements of the American Occupational Therapy Association (AOTA), asserting that "efforts to lessen or eliminate health disparities are consistent with the Core Values and Code of Ethics for the profession of occupational therapy" (Braveman, 2006, p. 679). Occupational therapy uniquely contributes to the public health agenda with expertise in activity performance, client-centeredness, and overcoming barriers to occupational participation. Occupational therapists have a responsibility to deliver culturally competent care as indicated in the Occupational Therapy Practice Framework (AOTA, 2008), which asserts that cultural context has a relevant influence over

performance. This is also consistent with the Occupational Therapy Code of Ethics (AOTA, 2005) that requires recognition and appreciation of all cultural components in order to provide services that are equitable.

Despite wide recognition of the importance of cultural competency in reducing disparities, there is no established standard definition, making it difficult to formally implement and document the use of culturally adapted practices. Most commonly recognized definitions of cultural competence exist in the nursing profession, particularly with Campinha-Bacote's (1999) view that cultural competence is demonstrated as an ongoing process that involves the understanding and appreciation of different behaviors and beliefs, awareness of one's own biases, knowledge that variation exists within cultural groups and an inherent ability to adjust practice to provide effective interventions for people in a culturally sensitive manner.

There are different levels at which cultural competence is analyzed: the provider and treatment level, the institutional or organization level, and the systems level (e.g., larger system of care) (Sue, Zane, Nagayama Hall & Berger, 2009). Some examples of different culturally adapted practices at the provider and treatment level include use of and coordination with interpreter services, bilingual staff, community health workers, traditional healers, family members, culturally competent health promotion, and racial/ethnic and cultural matching of client and therapist (Brach & Fraserirector, 2000; Hasnain et al., 2009). Culturally adapted practices occur when standard therapy procedures are changed to fit individual

needs by using some variation of non-traditional practices in treatment with ethnically diverse clients.

Goode, Dunne, and Bronheim (2006) proposed that organizations embracing cultural competence will see improvements in health outcomes, patient satisfaction, and communication, as well as decreased system costs and discrimination. There is a high prevalence of studies on this topic in nursing and psychology literature, highlighting the active standards and measures that are in place to support cultural competency in practice (Purnell, 2005; Servonsky & Gibbons, 2005; Sue et al., 2009). Some of the validated instruments to measure the cultural competency of health professionals in these fields include the Inventory to Assess the Process of Cultural Competence Among Healthcare Professionals (Campinha-Bacote, 1999) used in nursing, the Multi-cultural Awareness, Knowledge, and Skills Survey (Kim, Cartwright, Asay, & D'Andrea, 2003) in psychology and the Multicultural Counseling Inventory (Sodowsky, 1996) in counseling. Recently, Suarez-Balacazar et al. (2009) developed and validated an instrument, the Cultural Competence Assessment Instrument from the University of Illinois at Chicago (CCAI-UIC), to measure cultural competence among rehabilitation practitioners, and used occupational therapists as participants. This assessment supports the literature's focus on perceived levels of cultural competence among occupational therapists, but calls attention to the need for further research on the ways therapists actually modify and adapt their current practice to support culturally competent delivery (Suarez-Balacazar et al., 2009, 2011).

Work rehabilitation. In work rehabilitation, occupational therapists serve clients who are experiencing difficulty with work performance or fulfillment of the worker role (Lysaght & Wright, 2005). In treatment, they consider the client's skills and abilities, motivation, potential for improvement, psychological status and performance goals (AOTA, 2008). The goals of work rehabilitation are to increase worker performance after injury or illness, prevent future injury in the workplace, maintain health, promote safe work environments and practices, and help with a timely return to work (AOTA, 2011). Ellexson and Larson (2011) identified ways to address these goals, some of which include education in body mechanics, stress and pain management, strategies to improve communication, emotional regulation and coping skills, and simulated work tasks along with job adaptations and modifications to improve work participation.

Occupational therapists provide work rehabilitation in a variety of settings, including outpatient rehabilitation centers, hospitals, private clinics, and business and industrial environments (AOTA, 2011). The standard return-to-work process includes evaluating the client and the work requirements through a functional capacity evaluation and a functional job analysis. Information gained from a functional capacity evaluation can be used to match the individual's capabilities with the requirements of the job, helping therapists to determine a worker's ability to resume working, make any necessary job modifications, or for setting goals and treatment plans. Intervention commonly includes a combination of work conditioning and work hardening programs to facilitate a client's return to work. Work hardening is the more intensive program that incorporates a rigorous, multi-

disciplinary treatment delivered over long hours to offer specific job-related training, often through work simulation tasks (Rice & Luster, 2008).

In the 1980's, work rehabilitation filled a much-needed niche in job-related injury services. Chronic pain disorders and cumulative musculoskeletal trauma surpassed the incidence of acute trauma in workers' compensation claims (Niemeyer, Jacobs, Reynolds-Lynch, Bettencourt, & Lang, 1994). Additionally, evidence at this time was growing to support the use of a biopsychosocial, interdisciplinary approach with these injuries to reverse a previously declining return to work rate when a biomedical view was used (Niemeyer et al., 1994).

With the cost of lost productivity increasing and the number of work-related injuries among ethnic populations also on the rise, occupational therapists in work rehabilitation may be in high demand and positioned to have to adapt their practice to meet the needs of a more diverse work force. Norrefalk, Ekholm, and Borg (2006) showed in Sweden that it is possible to provide effective return to work assistance to immigrants in the context of an intensive, structured program adapted to immigrants. In their eight week program, they utilized psychological pain management, group counseling, physical, functional and ergonomic training, pain management, relaxation groups, family meetings, and visits to the Labor Market Institute. Comparable research needs to be done in the U.S. to assess practices that are currently used to address the needs of foreign-born workers in their recovery from work-related injuries. Cultural competency has the potential to strengthen the client-therapist relationship and improve adherence to treatment recommendations,

thereby increasing client satisfaction and rehabilitation outcomes (Hasnain et al., 2009).

Psychosocial challenges. Keough and Fisher (2001) wrote that a worker's return to work status is often affected by mental health problems or his or her emotional well-being, as well as perception of pain and decreased self-efficacy. Occupational therapists are well established to address the needs of injured workers experiencing mental health barriers to performance. This is especially relevant for work rehabilitation, as injured workers experience many psychosocial challenges that influence the rate at which they return to work. Along with a higher rate of injury for immigrant populations over the general population, occupational therapists have identified cultural barriers as an impediment to therapy and an issue that almost always must be addressed throughout treatment (Wardin, 1996).

Considering the scope of practice in this setting and the mental health problems of diverse clients, culturally adapted practices may be especially beneficial if implemented widely and would reflect the core philosophy of establishing meaningful, productive interventions in occupational therapy services. Lysaght and Wright (2005) identified a large overlap in work-related practice between the services offered by physical therapists and occupational therapists. Even though their study did not examine the way the services were provided or which outcome measures were based on which discipline's treatment, it still indicates a need for role delineation by occupational therapists to be unique from other disciplines working in work-related practice. Occupational therapists are distinctly qualified to return clients to work with their focus on human performance in all occupations

across all contexts of life. The recognition that work satisfaction and success is affected by performance in many life roles can guide occupational therapists in their selection of occupation-based activities for treatment. This is important, as it can be determined whether barriers to return to work are physical or psychosocial, or both, and what possible motivational factors play a role, since those who find intrinsic value in their work role are most likely to be successful (Keough & Fisher, 2001). It is in the profession's best interest to recognize the value in occupational therapy's background in mental health and socio-cultural awareness, and to consider whether work rehabilitation therapists are adequately applying these skills in practice to meet healthcare's cultural competence standards.

Assessing practices. Although much published research assesses the cultural competence of occupational therapists by evaluating knowledge and beliefs as the key indicators, little has been done to assess practices. There is a particular shortage in research of this nature in work rehabilitation settings. Wardin (1996) has examined the ways therapists adapt to language barriers across settings, but that study was over 15 years ago and looked only into those methods used to adapt verbal evaluation with limited English proficiency clients. Results from the Wardin study suggested that language skills were not beneficial in treatment without further understanding of cultural differences, and that more research was needed to look at the effects of collaborative goal setting with a minority ethnic population. As occupational therapy is increasingly recognized and respected in the health care community worldwide, it is particularly important to deepen the research base in specific practice settings to keep up with growing literature in other healthcare

fields. Since it can be expected that work rehabilitation settings will be seeing more immigrants, it could be a guide for other occupational therapy practice settings in the future. Before examining the efficacy of culturally adapted practices, it must first be determined what those culturally adapted practices are. Therefore, the purpose of this study is to explore ways in which occupational therapist practitioners use culturally adapted practices when working in work rehabilitation settings.

Method

Design

To better understand how therapists use culturally adapted practices in treatment, a survey method was used as the basis of a descriptive study. This approach provided measurable information about the experience of therapists to better understand the practices of those working in work rehabilitation. Additionally, this method was best for accessing a larger number of geographically diverse therapists, making study results more relevant nationally. Data was collected through a mailed questionnaire targeted to occupational therapy practitioners that have experience practicing in work rehabilitation settings.

Participants

The ideal population for this study included all occupational therapy practitioners in the U.S. who work, or have worked, in a work rehabilitation setting. Due to budget and time constraints, the accessible sample was a systematic random sample of 250 therapists listed as members of the Work and Industry Special Interest Section of the American Occupational Therapy Association (AOTA). Members on this list had an interest in, and were likely to have worked in, a work

rehabilitation setting. Participants in this study had to be registered occupational therapy practitioners. They did not have to currently be practicing, but it was required that they had practiced in a work rehabilitation setting within the last ten years. All members who received a survey who had worked in a work rehabilitation setting for at least one year were asked to return a completed survey. If a member who had not worked in work rehabilitation received a survey, they were asked to identify this and return the survey incomplete.

Instrument

An original survey was designed based on formatting recommendations from Salant & Dillman (1994) and on feedback from a pilot study completed by three work rehabilitation therapists referred by the occupational therapy program faculty. Survey methods do have limitations, including participants' inability to ask questions of the researcher if content is misleading or confusing. Closed ended questions also restrict answers and are limited in their capacity to gather diverse information. With these considerations in mind, the survey's purpose was (a) to identify specific culturally adapted practices utilized by therapists in this setting for ethnically diverse clients, and (b) to gather information from therapists regarding potential barriers and supports that may affect their ability to implement culturally adapted practices in treatment. Additional content included questions on demographic background such as years in practice, level of education, geographic location of practice, race/ethnicity of therapist, and percentage of population treated that is racially/ethnically diverse. Questions were a combination of multiple choice, check-all-that-apply, and limited open-ended questions (see Appendix).

Procedures

The survey was reviewed by a committee of university faculty members and revised based on feedback from a pilot study completed by therapists referred by occupational therapy program faculty. Following the pilot study and approval by the Institutional Review Board, the survey was mailed to participants.

AOTA supplied addresses for the random list of 250 therapists obtained from the Work and Industry Special Interest Section. Two sets of mailing labels were printed with these addresses. All electronic addresses were deleted once mailing labels were printed. The mailing included one survey, a letter explaining the purpose of the study and terms of confidentiality, and a postage paid, self-addressed return envelope. To track non-respondents, each envelope's mailing label and corresponding follow-up mailing labels were numerically coded. When surveys were returned, they were matched to their corresponding follow-up mailing label and both the return envelope and follow-up mailing label were discarded. Individual surveys were not coded and, therefore, cannot be linked to the address on the mailing envelope. This ensures confidentiality, as there is no way to track a survey to an address once the reminder label is destroyed.

Mailed questionnaires require follow-up methods to ensure optimal response rate, therefore, a typical follow-up method was used and reminder letters sent to non-respondents. Two weeks after the first mailing, a second mailing was sent to non-respondents using the remaining follow-up mailing labels and included the survey, explanation letter and self-addressed stamped envelope. The same procedure was used for destroying envelopes that was used during the first mailing.

All data collected from surveys was entered into SPSS statistical software for further analysis.

Data Analysis

Data was collected from February to March 2013 and was analyzed using SPSS statistical software. Descriptive statistical analyses (e.g. frequency, central tendency, variability) were used to characterize responses based on demographics, formal training, language skills, and the different ways therapists adapt practice to accommodate the foreign-born population. This helped determine, for example, various strategies used in practice and how often they were used. Descriptive statistics were also helpful for examining the rationale used for certain practices and why occupational therapy practitioners might not use culturally adapted practices. Associations between demographics and content responses were determined using chi-square analysis and Spearman's rho.

Results

Of the 250 surveys that were sent to registered occupational therapist practitioners nationwide, 114 (45.6%) were returned and 1 was undeliverable. Nineteen (16.7%) of the 114 did not meet the inclusion criteria. Data from 95 surveys was analyzed, for a usable response rate of (38%). Most respondents were registered and/or licensed occupational therapists (86, or 90.5%) and the remaining 9 were occupational therapy assistants. Most of the entry-level occupational therapy practitioner degrees were at the bachelor's level, 54 (56.8%) (see Figure 1). Most respondents' primary work setting was identified as hospital based or freestanding outpatient services (32, or 39%) (see Figure 2). Eighty-two (86.3%) of overall

respondents identified as white (see Figure 3) and most were from the Midwest region (40, or 43%) (see Figure 4). The range for clinical experience for all respondents was two years to 50 years with a mean of 23.4 years. The range of years practicing in work rehabilitation was 0.3 years to 45 years, with a mean of 16.7 years.

Language Skills and Formal Training

All respondents were fluent in English, rating themselves a 5 on a scale of 1 to 5, with 5 signifying the ability to converse on a broad range of topics and 1 showing a basic ability to use greetings and ask simple questions. Sixty-seven (70.5%) reported some skills in a second language and 15 (15.8%) reported skills in more than two languages. Of those who reported a secondary language, 24 (25.3%) had at least intermediate skills in that language. Spanish was the most common second language reported, with 60% of respondents reporting some skills (range=1-5; M = 1.84), with 24.6% at an intermediate or above level.

When asked whether they have received formal training for working with clients from diverse cultural backgrounds, 57 (60%) responded yes. The most common method of receiving training was in-service training, 36 (63.2%), followed by continuing education and part of OT academic program, both with 24, (42.1%) each. The format was most often a lecture, 41 (79%), or workshop, 32 (56.1%), with ongoing language immersion classes the least reported format, 5 (8.8%).

Culturally Adapted Practices

Respondents reported the approximate percentage of foreign-born clients treated both in the past year and in their current caseload. The range for both the

past year and the current caseload was 0% to 100%, with the recent year (*M* = 13.9%) greater than the current caseload (*M* = 10.8%).

Respondents were asked how often they use certain culturally adapted practices in therapy with foreign-born clients, ranking their use on a scale of 1 to 5, with 1 indicating "Never" and 5 as "Every time". The practice used most often was working with a certified interpreter in person (*M* = 3.26), followed by actively engaging family in treatment sessions (*M* = 2.98). The practice used the least was utilizing focus groups or support groups with clients of similar ethnic background (*M* = 1.21). Those respondents who received formal training working with clients from diverse cultural backgrounds reported using each practice more often than those without formal training. More detailed results are listed in Table 1. For an open-ended question about other practices/strategies used, 25 (26.3%) responded. Details of these responses are in Table 2.

Significant correlations that were found between occupational therapy practitioners with formal cultural training and use of culturally adapted practices are listed in Table 3, indicating that those with formal training are more likely to use these practices. There was a significant low correlation between therapists with a higher percentage of foreign born clients on their caseload in the most recent year and incorporating a cultural influence into the content of the intervention, $r(87) = .236$, $p < .05$, and consulting or collaborating with community leaders or spiritual healers, $r(88) = .269$, $p < .05$, in that those with more foreign-born clients on their caseload were more likely to use these practices. Those respondents with a higher academic degree were more likely to utilize focus groups or support groups with

clients of similar ethnic background, $\chi^2(9, N = 90) = 17.460$, $p < .05$. Those who reported skills in at least one other language were more likely to use translated materials/videos when working with clients with limited English proficiency, $r(87) = .334$, $p = .002$. There was no correlation between years of experience as an OT practitioner and use of any of the practices, but there was a statistically significant low correlation between years of experience in work rehabilitation and use of translated materials/videos, $r(87) = -.220$, $p = .038$, in that those with less experience are more likely to use this practice.

Understanding Goals and Rating of Adequacy

Respondents were asked on a scale of 1 to 5, with 5 being "very well" and 1 "not well," how well they understand the treatment needs of both clients who do not fluently speak English and those who do fluently speak English. Respondents rated their understanding of treatment needs of those who do speak fluent English (range = 2-5; $M = 4.56$) higher than those who do not speak fluent English (range = 1-5; $M = 3.66$). Those who have received formal training (range = 2-5; $M = 3.80$) scored higher than those without formal training (range = 1-5; $M = 3.43$) for understanding treatment needs of non-fluent clients and this difference was statistically significant, $t(88) = -1.989$, $p = .050$.

There was a statistically significant correlation between formal training and understanding of treatment needs of non-fluent clients, in that those with formal training are more likely to rate themselves higher for understanding the treatment needs of non-fluent clients, $\chi^2(5, N = 90) = 12.361$, $p < .05$. There was a significant low correlation between therapists with a higher percentage of foreign-born clients

on their caseload in the most recent year and understanding of treatment needs of non-fluent clients, $r(88) = .260$, $p = .013$, in that those with a higher percentage of foreign-born on their caseload reported a better understanding of non-fluent clients.

There was no association between academic degree and understanding the treatment needs of non-fluent clients, $\chi^2(15, N = 90) = 12.873$, $p > .05$, nor between those who reported skills in at least one other language and understanding the treatment needs of non-fluent clients, $\chi^2(5, N = 86) = 8.572$, $p > .05$.

Respondents were asked on a scale from 1 to 10 with 10 being the highest whether they felt they had adequate tools, resources and knowledge to provide appropriate culturally competent rehabilitation. Respondents as a whole reported a range from 1 to 10 with a mean of 6.81. Those with formal cultural training (range = 3-10; $M = 7.13$) scored themselves higher than those without formal training (range=1-10; $M = 6.28$), but this difference was not statistically significant, $t(51.13) = -1.729$, $p > .05$, and there was no statistically significant association, $\chi^2(9, N = 86) = 16.510$, $p < .05$. There are no associations between this ranking and level of academic degree, those who reported skills in another language, percentage of foreign-born clients, or years of experience.

Respondents were asked open-ended questions about what they feel makes them most effective with foreign-born clients and what they feel is needed to improve their effectiveness with foreign-born clients. The most common response for what makes them most effective was their use of therapeutic use of self, 28 (32.9%), followed by use of interpreters, 15 (17.6%). Detailed responses are listed in Table 4. The most common response for what they felt would make them more

effective was more cultural awareness/cultural diversity education, 20 (27.4%), followed by increased language skills, 14 (19.2%) and better access to interpreters/therapy specific interpreters, 14 (19.2%). (See Table 5). Five (5.3%) respondents reported that they did not feel alternative practices were needed.

Supports and Barriers

Respondents identified the reasons why they either do or do not use these practices with foreign-born clients. Summaries of these reasons are presented in Tables 6 and 7. The most common reason the practices are used is that they help to address client needs/goals, 69 (80.2%). The most common reason the practices are not used is that they are not available at the respondent's setting, 48 (56.5%).

There is a statistically significant association between those with formal cultural training and using practices because they help to address client needs/goals, in that those with formal training are more likely to report this reason, $\chi^2(1, N = 86) = 5.346$, $p < .05$. Those who do not have formal training are more likely to report not using the practices because they do not have the education on/knowledge of the practice(s), $\chi^2(1, N = 85) = 4.387$, $p < .05$. Those who reported skills in another language were more likely to report using practices because they help to address client needs/goals, $\chi^2(1, N = 82) = 5.976$, $p < .05$.

Discussion

Use of Culturally Adapted Practices

Results of this survey revealed that of all listed culturally adapted practices, occupational therapy practitioners are most likely to use certified interpreters in person, but that they are using them just more than "sometimes". Research shows

that the use of a certified interpreter in person is most beneficial for the client and should be used in favor of family or staff member to reduce misinformation and increase client rapport (Betancourt et al., 2002). It has also been shown that patients are often not aware of their legal rights to an interpreter in some settings and that not asking about their preference for using an interpreter results in lower patient satisfaction and adherence to treatment plans (Schenker, 2008). What is unclear is the quality and availability of the interpreter services being used, since 14 respondents indicated that more availability and improved interpreter services would make them more effective in their treatment of foreign-born clients. Additional comments identified a need for more therapy specific interpreters to ensure that relevant information was getting passed along appropriately. This would be a service quite often impacted by the systems or organizational level of service and would be best explored further at that level.

These trends in responses indicate that language skills are a significant barrier commonly encountered while working with foreign-born clients. Interestingly, though, the most common response for what makes respondents most effective was therapeutic use of self, with responses most commonly including humor, respect, compassion, and patience. This indicates that, for many people, they may be finding other ways to relate to, and communicate with, this population that does not involve verbal language. Some comments also reflect an attitude that language skills are not always the primary barrier and that cultural values have a greater influence, such as responses stating “language is not always the concern, but values” and “there are many other cultural aspects that also enter into it. In other

words, the language is not the only factor." This is supported by Wardin (1996) where occupational therapists identified that language skills without an understanding of cultural differences was not beneficial when working with diverse clients.

Respondents were unlikely to consult with community leaders or spiritual healers or use support groups with similar ethnic groups, yet it has been shown that many foreign-born workers consult indigenous healers before accessing conventional health care, especially among the Latino population where indigenous healing methods often are their first level of healthcare. They often turn to alternative approaches because of the insensitivity from and lack of understanding from others involved in their care (Cervantes & Lechuga, 2004). Community leaders and health workers serve to connect underserved populations to the healthcare system, often by disseminating information and assisting with appointment keeping (Brach & Fraserirector, 2000). Occupational therapy practitioners rarely consult with these other groups, yet the majority of those that responded to the open-ended question about additional practices said they discussed culture, alternative medicine, or family history with the clients and this could have easily led to resources for community leaders or spiritual healers. Those respondents with a higher percentage of foreign-born clients on their caseload are more likely to consult with community leaders or spiritual healers and this may be due to their recognition of the benefits or their familiarity with such resources after having worked with more clients utilizing them. It may be beneficial for occupational therapy practitioners to consult with these groups in order to better understand the

treatment needs of foreign-born clients and to facilitate attendance and adherence to therapy.

Occupational therapy practitioners with formal cultural training reported using all culturally adapted practices more often than respondents without formal training, and were more likely to use translated materials/videos when working with clients with limited English proficiency (LEP), actively engage family in treatment, incorporate a cultural influence into the content of the intervention, consult or collaborate with community leaders or spiritual healer, and use cultural concepts, values, examples in their intervention. The only significant finding for those with higher academic degrees was with their use of focus groups or support groups with this population, indicating that formal cultural training may have a greater effect than academic learning on use of culturally adapted practices.

It is expected that those with more cultural training would be more likely to use culturally adapted practices in therapy and this is a significant finding that has been supported by other research. A systematic review of interventions designed to improve cultural competence in health professionals showed that training positively impacts attitude, knowledge and skills of practitioners and may also improve patient satisfaction (Beach et al., 2005). The Cultural Competence Assessment Instrument (CCAI) was used to examine perceived levels of cultural competence among occupational therapists and found that those with more formal training rated themselves higher in perceived level of cultural competence than did those without formal training (Suarez-Balcazar et al., 2011). Little research was found exploring the actual use of culturally adapted practices, but this current study may help

support the findings that those with more formal training have a higher perceived level of cultural competence and, therefore, may feel more confident employing culturally adapted practices with foreign-born clients. It was found that respondents with formal training were more likely to rate themselves higher for understanding the treatment needs of non-fluent clients than those without formal training. This is also true for those respondents with a larger percentage of foreign-born clients on their caseload. These findings support what would be expected in that those with more cultural training and experience with diverse clients better understand the treatment needs of foreign-born clients and are more likely to report using practices that are adapted to meet those treatment needs.

Therapists with more foreign-born clients on their caseload were more likely to incorporate a cultural influence into the content of the intervention and consult or collaborate with community leaders or spiritual healers. There were no significant associations between use of practices and years of experience as an occupational therapist, although previous research has found an association (Sodowsky, 1996). This indicates that more work experience does not necessarily mean more experience with a foreign-born population and that experience with a foreign-born population may better prepare practitioners to address needs that differ from those of the general population. Interestingly, those with more experience in work rehabilitation were less likely to utilize translated materials in practice, even though this was the fourth most used practice. Those with skills in a second language were more likely to use translated materials, possibly indicating that this method is helpful for English language learners, or that it was able to be communicated that

they wanted translated materials. Those who speak another language may also be more aware of the language needs of clients with limited English proficiency, and do not require the use of interpreters or family for communication purposes.

Barriers and Supports

The most common reported reasons for using culturally adapted practices is that they help to address client needs/goals and they help to increase the clients' participation in the OT treatment program. This is important, since there is a low follow through with treatment for foreign-born clients compared to non-foreign born. Reasons for this have been reported in the literature and have been attributed to the client's preferred language not being used or the treatment not being sensitive to the client's cultural beliefs (Cervantes & Lechuga, 2004; Hasnain et al., 2009). If using culturally adapted practices is believed to increase participation in therapy, it may be an important contribution to alleviating the problem of missed follow up appointments and discontinuation of health services that occurs with this population. Those with formal cultural training are more likely to report that these practices help to address client needs/goals than those without formal training and those who reported skills in another language are also more likely to report this reason than those without additional language skills, further supporting the evidence that formal cultural training helps occupational therapy practitioners understand the treatment needs of foreign-born clients.

Seventy-three percent of respondents reported that use of culturally adapted practices leads to better functional gains for most clients, which would imply that most respondents are using at least one of these practices most of the time, but this

is not indicated by the results. It cannot be determined why certain individual practices were not used, but the responses for not using the practices as a whole show that most practice(s) were not available at their setting, the practitioners did not have knowledge of the practice(s), or the practice(s) took too long or were too difficult to use. Organizational supports and barriers to service delivery have not been examined in detail, but it has been shown through a follow up study of cultural competence trainees that there is a strong association between organizational support, awareness and skills (Suarez-Balcazar et.al, 2011). This institutional impact on service delivery is reflected in the high response rate identifying that practices are unavailable in their setting. Practitioners may be willing to adapt their practices, but institutional policies may inhibit or discourage an ability to do so. It is unclear from this study if formal cultural training has an influence over a practitioner's capacity to recognize and address this issue in order to continue to deliver culturally competent care. Those who do not have formal training are more likely to report not using the practices because they do not have the education on/knowledge of the practice(s), which is expected, and may also demonstrate that formal training is considered useful for choosing approaches taken with foreign-born clients.

Limitations

This study was conducted by a researcher with little experience with work rehabilitation and its scope of practice. The study did not receive input from foreign-born clients and their personal experiences in work rehabilitation; therefore, the perspective is limited to that of the occupational therapy practitioner. This survey was not designed to obtain specific information as to reasons behind the use of

particular practices, instead only gathering information on all practices as a whole. This makes it difficult to interpret the barriers and supports for the use of all culturally adapted practices. There was also no established definition for "foreign-born clients"; therefore, some practitioners may have answered based on their experience with all multi-cultural clients, making results difficult to generalize to the foreign-born population as a whole.

Implications for OT

The majority of respondents reported that additional education in cultural diversity or cultural awareness would increase their effectiveness with this population, signifying that curriculum design and continuing education credits should be explored further and expanded upon in the field of occupational therapy. This reflects Suarez-Balcazar et al. (2009) findings that cultural competency was declared by occupational therapists as a core skill necessary to be effective in practice and that training should be emphasized to help develop these skills.

Occupational therapy practitioners in a work rehabilitation setting should be more willing to consider community leaders and spiritual healers as a resource, since they are often highly involved with foreign-born clients. Establishing an open dialogue about the information and services clients are receiving from these sources may increase practitioners understanding of treatment needs and of their clients' experiences of pain and disability during the return to work process. Also, occupational therapy practitioners should continue to use certified interpreters with their clients, when needed, and include their clients in the decision to do so. Many clients are unaware of their legal right to interpreters in many situations, and

occupational therapists can play a part in helping inform those clients and increase their access to services.

Further Research

More research needs to be done on determining the return to work rate of foreign-born clients after completing work rehabilitation programs. In order to identify a consistent approach with this population, efficacy studies should be done on the outcomes of culturally adapted practices when implemented in work rehabilitation settings compared to traditional practices. Agencies recognize the need to address health disparities, but little evidence exists to support that cultural competency actually does reduce disparity or lead to better rehabilitation outcomes (Goode, Dunne, & Bronheim, 2006).

The majority of respondents indicated that use of culturally adapted practices lead to increased functional gains, increased participation in the OT program, and increased understanding of client needs/goals, yet this is not reflected in the relatively low reported use of each practice. More research needs to be done to determine what the barriers are for each practice and what supports are available to encourage use of culturally adapted practices. Also, many studies that do examine cultural competency do so at the provider level, but not at the systems level where policy and legislation impact how service is delivered by providers. Further examining the organizational and systems level of care may reveal a gap in support for implementing culturally adapted services by occupational therapy practitioners.

It is also important to further investigate the perspectives of foreign-born clients who are involved, or who have been involved, in work rehabilitation,

especially regarding those responses from practitioners indicating that culturally adapted practices are unnecessary. Exploring client perspectives through a qualitative study would be beneficial for further exploring the efficacy of such practices, as well as client satisfaction and quality of care experienced by foreign-born workers in a work rehabilitation setting.

Future research in this setting using The Cultural Competence Assessment Instrument (CCAI) (Suarez-Balcazar et al., 2011) could give insight into the level of perceived cultural competency of practitioners in conjunction with application of culturally adapted practices. This could serve as a baseline measure for determining the effect of cultural competency training and client outcomes in this setting.

Conclusion

Formal cultural training has emerged in this study as a key contributor to the increased use of culturally adapted practices and understanding of treatment needs of foreign-born clients. Occupational therapy practitioners with formal cultural training were more likely to use many of the culturally adapted practices in therapy than those without formal training. They were also more likely to respond that they use the practices because they help them to understand the client's goals, indicating that formal training may better prepare them to meet the foreign-born population's needs. Practitioners also responded that further cultural diversity and awareness training would be most beneficial for increasing their effectiveness with this population. These findings suggest that the needs of foreign-born clients beyond the intervention may differ from that of the general population. A more comprehensive study into the experiences of foreign-born clients in work rehabilitation is necessary

for future development of cultural competency training and for recognizing what the most appropriate and successful culturally adapted practices are for improving client outcomes.

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Appendix

Culturally Adapted Practices in Work Rehabilitation
University of Puget Sound
Occupational Therapy Program

This survey concerns occupational therapy practices used with foreign-born clients in work rehabilitation. For the purpose of this study, culturally adapted practices occur when standard therapy procedures are changed to fit individual needs of foreign-born clients by using some variation of traditional practices.

Directions: In the following section, please mark the appropriate blank with an X or check mark.

1. Are you a registered and/or licensed occupational therapy practitioner who is currently working or has worked in a work rehabilitation setting within the last 10 years?
___ Yes ___ No

2. Have you worked as an occupational therapy practitioner for at least one year?
_____ Yes _____ No

- If you answered "No" to either of the previous questions, you do not need to finish the rest of the questions. Please return the survey in the provided envelope. This helps the researcher keep track of response rates. Thank you.

Directions: In the following sections, please mark the blank with an X or check mark, circle items, or fill in the blanks as appropriate.

General Information

1. Are you a/an:
_____ C/OTA _____ OT/R/L

2. Number of years working as an occupational therapy practitioner: _____

3. Number of years of practice in work rehabilitation: _____

4. Entry level OT/OTA degree earned?
_____ Associate's _____ Bachelor's _____ Master's _____ Doctoral

5. Have you obtained any post-professional degrees?
_____ OTD

_____ MOT/MSOT
_____ (Other) _____

6. What is/was your primary practice setting in work rehabilitation?

_____ Hospital
_____ Hospital based or free standing outpatient services
_____ Private work rehabilitation clinic
_____ Business or industry

7. What demographic region of the country do you work in?

_____ West (AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY)
_____ Southwest (AZ, NM, OK, TX)
_____ Midwest (IA, IL, IN, KS, MI, MO, MN, OH, NE, ND, SD, WI)
_____ Northeast (CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT)
_____ Southeast (AL, AR, DC, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)

8. Which of the following categories best describes your racial or ethnic identification?

____ White
____ Hispanic
____ Black or African-American
____ American Indian or Alaskan Native
____ Asian
____ Native Hawaiian or other Pacific Islander
____ From multiple races

Work Setting Information

9. Have you had any formal training working with clients from diverse cultural backgrounds?
_____ Yes _____ No

10. If so, how did you receive this training (*check all that apply):*

_____ Part of your OT academic program
_____ Continuing education
_____ In-service training
_____ Other: _____

11. If so, how long was this training? _____

12. What was the format of the training?

_____ Workshop
_____ Lecture
_____ Ongoing language immersion classes
_____ Web-based learning

13. What languages do you speak? How well? *To answer this question, please fill in the table below. Circle the number that corresponds to your language proficiency in each identified language.*

Language *Please write in language*	Can converse on broad range of topics		Can converse on a limited range of topics; can understand clear, slow speech		Can use greeting and ask a few simple questions; often don't understand responses
English	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1
	5	4	3	2	1

14. In your most recent year in work rehabilitation, about what percentage of your clients were foreign-born? _____%

15. Of your current caseload, about what percentage of your clients are foreign-born? _____%

16. How well do you feel you understand the treatment needs of clients who **do not** fluently speak English? (*Please circle below with 5 being "very well" and 1 "not well")*

Very well Not well
5 4 3 2 1

17. How well do you feel you understand the treatment needs of clients who **do** fluently speak English? (*Please circle below with 5 being "very well" and 1 "not well")*

Very well Not well
5 4 3 2 1

Information about Practices

18. How often do you use the following practices in therapy with foreign-born clients?

Circle one number for each:

	Never	Rarely	Sometimes	Usually	Every Time
▪ Use translated materials/videos when working with clients with limited English proficiency	1	2	3	4	5
▪ Actively engage family in treatment session	1	2	3	4	5
▪ Work with a certified interpreter in person	1	2	3	4	5
▪ Work with a certified interpreter over the phone or computer	1	2	3	4	5
▪ Work with bilingual staff member as informal interpreter	1	2	3	4	5
▪ Work with a family member as interpreter	1	2	3	4	5
▪ Utilize focus groups or support groups with clients of similar ethnic background	1	2	3	4	5
▪ Incorporate a cultural influence into the content of the intervention (ie., types of food, health beliefs)	1	2	3	4	5
▪ Consultation or collaboration with community leaders or spiritual healer	1	2	3	4	5

▪ Use of cultural concepts, values, examples in the intervention (collectivism, story-telling, etc.)	1	2	3	4	5

19. Please list any other practices/strategies you use with foreign-born clients that are not listed above:

_____

_____

20. Of the practices that you **do use**, which of the following best describe(s) the reason you use them? (*Check all that apply*)

_____ I have education on/knowledge of the practice(s)
_____ The practice(s) leads to better functional gains for most clients
_____ The practice(s) are available at my setting
_____ The practice(s) give me useful information
_____ The practice(s) are easy/time efficient to use
_____ The practice(s) help to address client needs/goals
_____ The practice(s) help increase client's understanding of OT treatment
_____ The practice(s) help increase the clients' participation in the OT treatment program

21. Of the practices you **do not use**, which of the following describe(s) the reason you **do not** use them? (*Check all that apply*)

_____ I do not have education on/knowledge of the practice (s)
_____ The practice(s) do not lead to better functional gains for most clients
_____ The practice(s) are not available at my setting
_____ The practice(s) do not give me useful information
_____ The practice(s) are not easy/take too long
_____ The practice(s) do not help to address client needs/goals
_____ The practice(s) do not help increase client's understanding of OT treatment
_____ The practice(s) do not help increase the clients' participation in the OT treatment program

22. On a scale of 1-10 with 10 being the highest, do you feel you have adequate tools, resources and knowledge to provide appropriate culturally competent rehabilitation?
Circle one:

1	2	3	4	5	6	7	8	9	10

23. What do you feel makes you most effective with foreign-born clients?

_____

_____

_____

_____

24. What do you feel is needed to improve the effectiveness of your treatment with foreign-born clients?

_____

_____

_____

_____

Please put your survey into the business reply envelope and return to the Occupational Therapy Department at University of Puget Sound 1500 N Warner St, Ste 1070, Tacoma, WA 98406-9980. Please return this survey by March 9th.

Thank you for completing this survey

Table 1

Use of culturally adapted practices with foreign born clients

	All respondents	Respondents with formal training	Respondents without formal training
	Mean		
Work with a certified interpreter in person	3.26 (*n* = 90)	3.30 (*n* = 56)	3.18 (*n* = 34)
Actively engage family in treatment	2.95 (*n* = 88)	3.24 (*n* = 54)	2.50 (*n* = 34)
Use translated materials/videos when working with clients with LEP	2.74 (*n* = 90)	3.09 (*n* = 56)	2.18 (*n* = 34)
Work with a family member as interpreter	2.76 (*n* = 89)	2.77 (*n* = 56)	2.76 (*n* = 33)
Incorporate a cultural influence into the content of the intervention (i.e., types of food, health beliefs)	2.64 (*n* = 89)	2.87 (*n* = 55)	2.26 (*n* = 34)
Work with a bilingual staff member as informal interpreter	2.41 (*n* = 90)	2.55 (*n* = 56)	2.18 (*n* = 34)
Use of cultural concepts, values, examples in the intervention (collectivism, story-telling, etc.)	2.34 (*n* = 90)	2.57 (*n* = 56)	1.97 (*n* = 34)

Work with a certified interpreter over the phone or computer	1.93 (*n* = 88)	2.09 (*n* = 56)	1.68 (*n* = 34)
Consultation or collaboration with community leaders or spiritual healer	1.42 (*n* = 90)	1.57 (*n* = 56)	1.18 (*n* = 34)
Utilize focus groups or support groups with clients of similar ethnic background	1.21 (*n* = 90)	1.29 (*n* = 56)	1.09 (*n* = 34)

Note. LEP refers to limited English proficiency

Table 2

Other practices/strategies used with foreign-born clients (N=23)

	Frequency	%
Discuss culture, language, alternative medicine, or family history	7	30.4
Go onsite for real world experiences	3	13.0
Non verbal communication/demonstrations	2	8.7
Use music	2	8.7
Use pictures	2	8.7
Therapeutic use of self	2	8.7

Note. Online language translator, superstition, no strategy, translated materials and cultural sensitivity were each reported one time.

Table 3

Correlation of respondents with formal training and use of practices

	r-value	*p-value*
Use translated materials/videos when working with clients with LEP	.369	.000
Actively engage family in treatment	.272	.010
Incorporate a cultural influence into the content of the intervention (i.e., types of food, health beliefs)	.270	.011
Consultation or collaboration with community leaders or spiritual healer	.225	.033
Use of cultural concepts, values, examples in the intervention (collectivism, story-telling, etc.)	.254	.016

Note. LEP refers to limited English proficiency.

Table 4

What makes practitioners most effective with foreign born clients

	Frequency (n = 85)	%
Therapeutic use of self	28	32.9
Use of interpreters	15	17.6
Asking about their culture/finding mutual cultural beliefs	9	10.5
Personal experience/geographic location	7	8.2
Use of family	7	8.2
Personal research on specific cultural beliefs/cultural diversity	6	7.0
Language skills	3	3.5
Ensure understanding of goals before moving on in treatment	3	3.5
Non-verbal communication/body language	3	3.5
Demonstrations/pictures	2	2.3
Translated materials	2	2.3

Table 5

What is needed to be more effective with foreign-born clients

	Frequency (*n* = 73)	%
Cultural awareness/cultural diversity education	20	27.4
Increased language skills	14	19.2
Better access to interpreters/more therapy specific interpreters	14	19.2
More translated materials/more languages translated	8	11.0
Web translator app	4	5.5
More time with clients	4	5.5
Clients need to adapt to the language and US cultural value of work	2	2.7
Better understanding of pain	2	2.7
Family training/family included in team meetings	2	2.7
OT cultural guide to treatment through AOTA	1	1.4
Better research on cultural differences and outcome/better data norms between cultures	1	1.4

Table 6

Reasons for using practices

	Frequency (*n* = 86)	%
The practice(s) help to address client needs/goals	69	80.2
The practice(s) help increase the clients' participation in the OT treatment program	67	77.9
The practice(s) leads to better functional gains for most clients	63	73.3
The practice(s) help increase client's understanding of OT treatment	58	67.4
The practice(s) give me useful information	55	64.0
The practice(s) are available at my setting	41	47.7
I have education on/knowledge of the practice(s)	35	40.7
The practice(s) are easy/time efficient to use	31	36

Table 7

Reasons for not using practices

	Frequency (n = 85)	%
The practice(s) are not available at my setting	48	56.5
I do not have the education on/knowledge of the practice(s)	38	44.7
The practice(s) are not easy/take too long	24	28.6
The practice(s) do not give me useful information	9	10.7
The practice(s) do not help increase the clients' participation in the OT treatment program	9	10.7
The practice(s) do not help increase client's understanding of OT treatment	7	8.3
The practice(s) do not help to address client needs/goals	5	6.0
The practice(s) do not lead to better functional gains for most clients	5	5.9

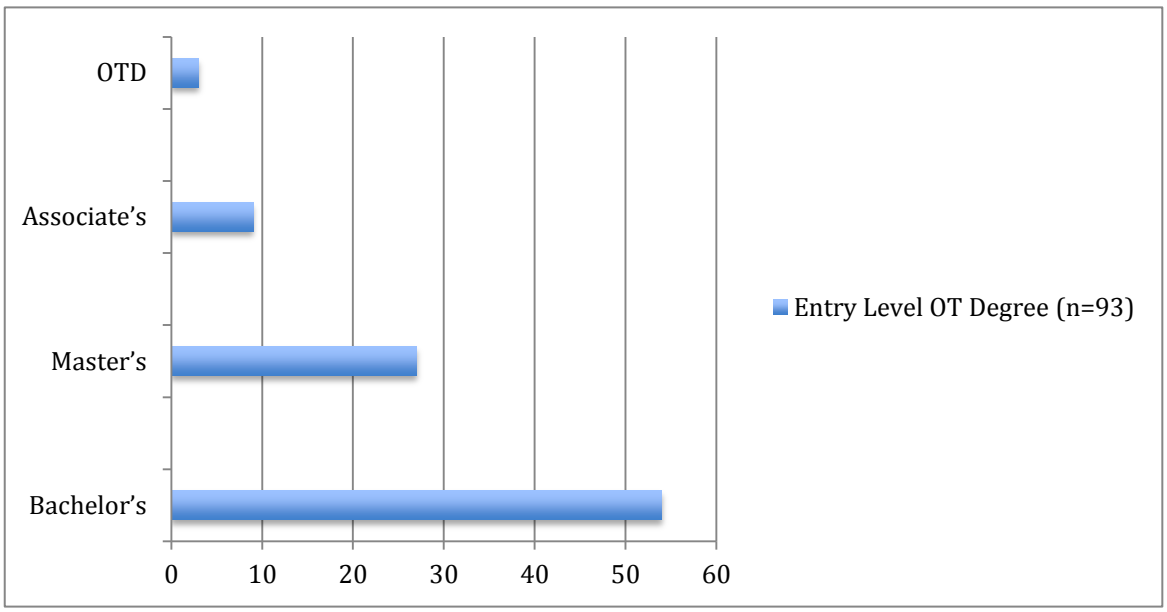

Figure 1. Frequency of entry-level OT degrees for all respondents

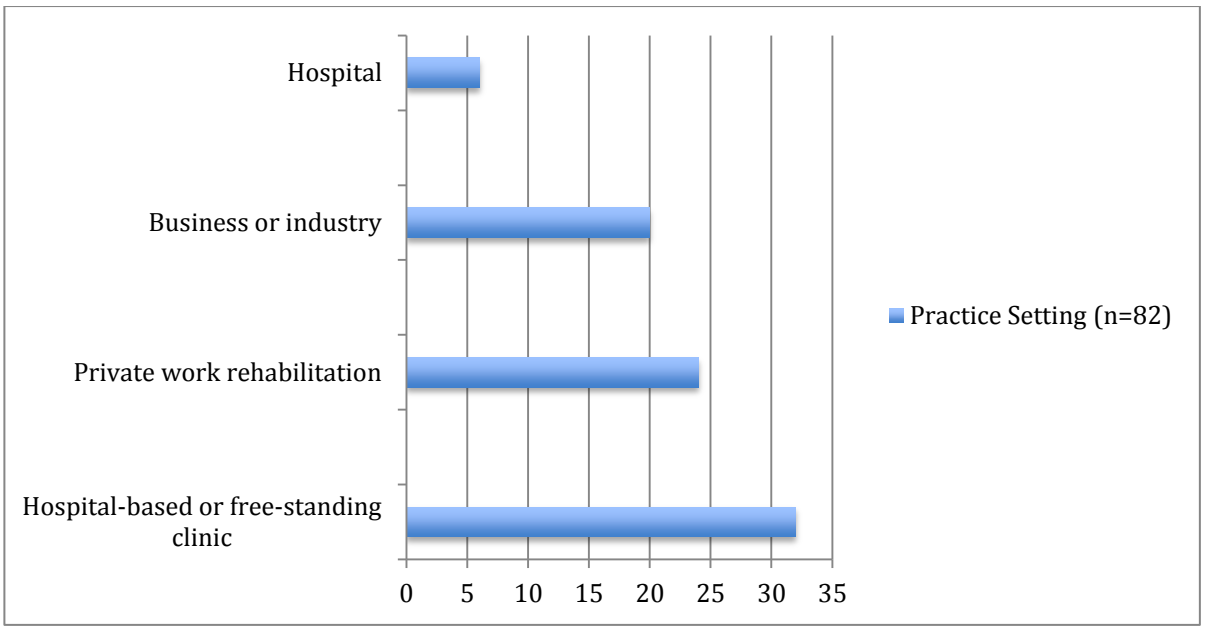

Figure 2. Frequency of primary practice settings for all respondents

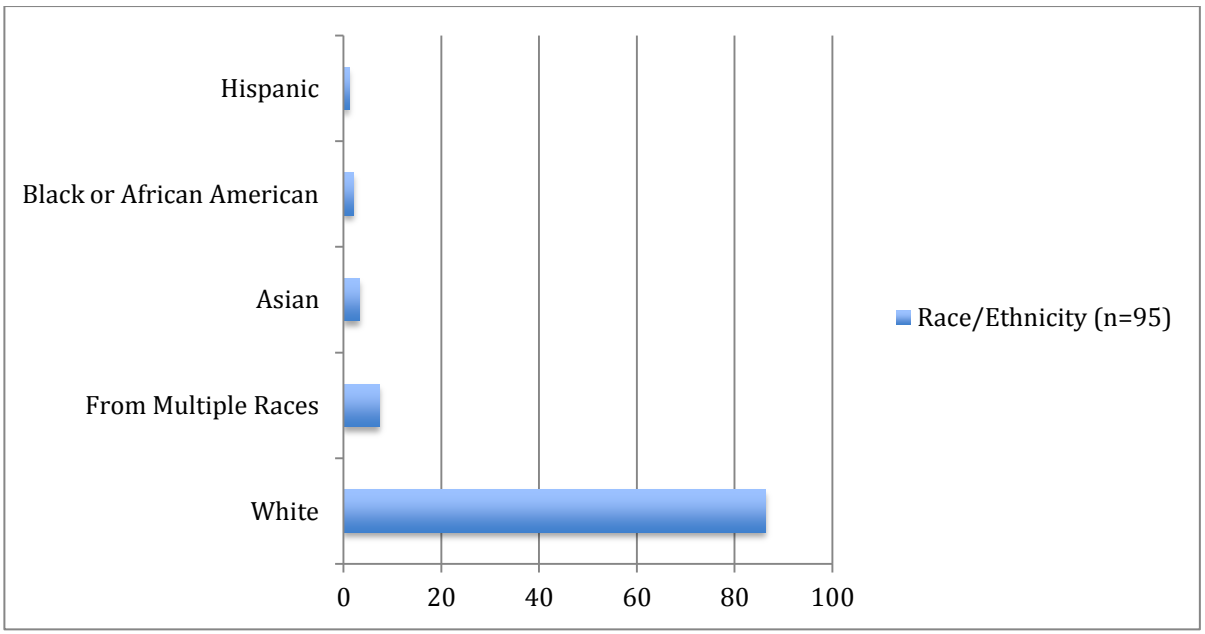

Figure 3. Percentage of respondents identifying with each race/ethnicity

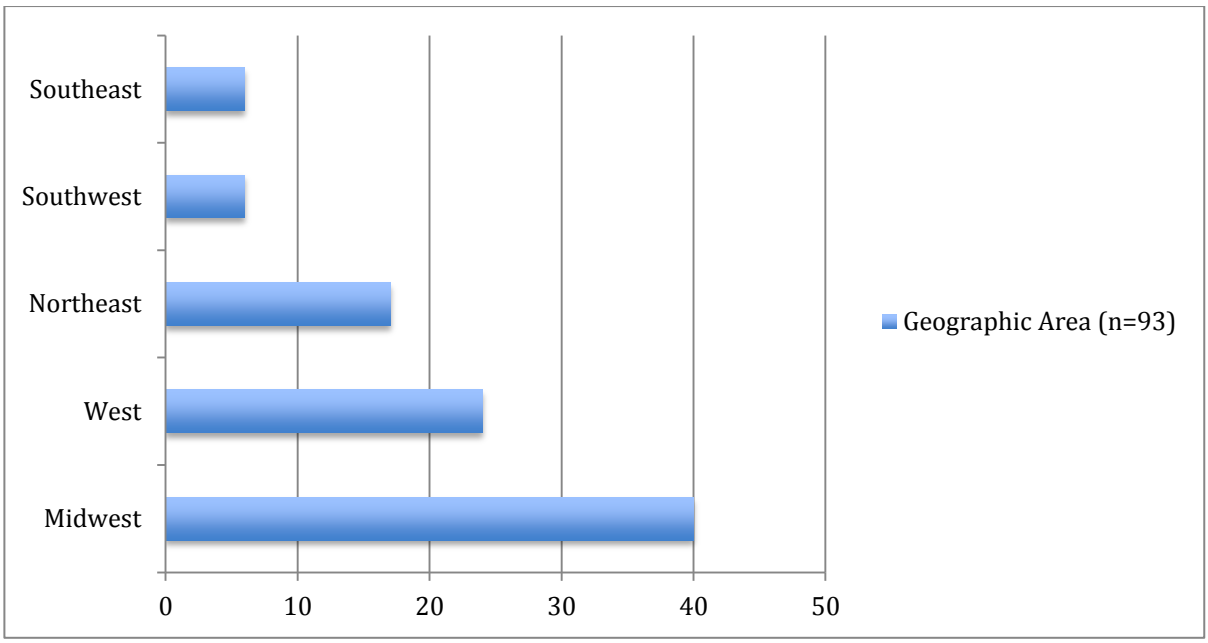

Figure 4. Frequency of demographic area of all respondents