The Importance of Developing Cultural Competence in Working with Families of Students with Disabilities from the Middle East, North Africa, and Southwest Asia

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The Importance of Developing Cultural Competence in Working with Families of Students with Disabilities from the Middle East, North Africa, and Southwest Asia

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This article describes the importance of developing cultural competencies when working with families who come from culturally and linguistically diverse (CLD) backgrounds. Using a mixed methods study, the experiences of 125 families from Middle Eastern, North African, and Southwest Asian (MENASWA) descent who have children in the U.S. Special Education system were analyzed. The intent of the research was to determine if specific demographics impacted the experiences and perceptions of these families, most specifically their perception of a school’s cultural competency. Survey responses and interviews resulted in numerous suggestions and recommendations that can help educators and administrators to better serve this under-represented population.

Key Words: Cultural competency, culturally and linguistically diverse (CLD), Middle Eastern, North African, Southwest Asian, MENASWA, special education families, communication issues

Non-Caucasian communities and peoples – hereafter referred to as culturally and linguistically diverse (CLD) groups – are rapidly changing the population landscape of the United States. For example, in 2014, Hispanics constituted approximately 18% of the total U.S. population; population trends predict that by 2060, 29% of U.S. citizens will be of Hispanic heritage (Colby & Ortman, 2015). Large portions of the overall CLD population are understudied and being left behind in efforts to determine what culturally responsive services may be needed (Keo, 2010; Lo, 2008; McLeod, 2012). Potentially at risk are American residents with Middle Eastern, North African, and Southwest Asian heritage (MENASWA), who are among the most understudied minority groups (Abadeh, 2014; Campbell-Wilson, 2012; Donovan, 2013; Khateeb, Hadidi, & Khatib, 2014). The lack of scholarship on the MENASWA population is alarming given current estimates of the U.S. MENASWA population. While a rigorous estimate of the U.S. MENASWA population is beyond
the scope of this study, aggregate estimates of just three major ethnicities/nationalities (Arab, Iranian, and Armenian) within the MENASWA population amounts to more than 6 million U.S. residents; this is based on reports of 3.7 million Arabs (Arab American Institute, 2014), 1 million Iranians (Harvey & Blum, 2012), and 1.5 million Armenians (Tolson, 2007). The lack of scholarship on the MENASWA population is related to the difficulty in finding accurate data for MENASWA populations in the United States since the current Federal Census racial/ethnic classification categorizes individuals from MENASWA descent into “White” and/or “other” categories (U.S. Census Bureau, 2017). This categorization fails to accurately reflect the number of MENASWA presently living in the United States and the designation does not capture the unique experiences of individuals of MENASWA descent (Humes et al., 2015).

The problem addressed by this study focuses on the lack of research on developing cultural competence in working with families who are of MENASWA descent. Specifically, this study is concerned with the MENASWA population in the context of special education and family experiences. This study presents why it is helpful to consider the shared experiences and difficulties of MENASWA families in an effort to improve educators’ cultural sensitivity and competencies. The long-term wellbeing of students with disabilities from CLD backgrounds and their families, as well as broader social costs, are at stake. The graduation rate of students enrolled in special education services is 63% (Grindal & Schifter, 2017; Kraus, 2016), which is notably lower than their non-disabled counterparts who are graduating at rate of 81% (National Center for Education Statistics, 2015). There is an even greater disparity in the academic achievement of students with disabilities from CLD backgrounds (Scott, Hauerwas, & Brown, 2013), as they are falling significantly behind their non-disabled peers from dominant cultures (National Center for Education Statistics, 2015). The intersection of disability and CLD background acts as a double jeopardy for these students. High school dropouts face, on average, higher rates of incarceration, depression, poverty, homelessness, and dependence on social welfare programs than other groups (Schargel & Smink, 2014).

Sheldon (2003) pointed to positive family-school partnerships as one way to help improve special education services, and ultimately improve academic achievement. Collaboration between schools and families in the design and implementation of special education services is also a key mandate of the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) (Heward, 2012). Despite the fact that collaboration and communication between parents and professionals have increased and improved, there remain significant challenges in the development of effective family-school partnerships in general (Murawski, Carter, Sileo & Prater, 2012). The obstacles to effective partnerships are even more prominent for CLD families, who face numerous barriers to participation, such as lower English language proficiency and lack of time or adequate resources (McLeod, 2012; Rodriguez, Blatz & Elbaum, 2014).

Researchers have identified the importance of cultural competency and cultural proficiency as an ability of educators to successfully serve children and youth from all of the cultural backgrounds represented within the school population.
(Lindsey, Robins, & Terrell, 2003). Generally, within the field of education, the terms cultural competency and cultural proficiency refer broadly to the ability of educators to successfully serve children and youth from all the cultural backgrounds represented within the school population, and in particular, those students who are growing up in non-dominant cultural contexts (those from racially/ethnically, linguistically, or economically marginalized groups). Educators’ deficits in understanding cultural differences may intensify barriers to effective partnerships (Lo, 2008; McLeod, 2012; Olivos, Gallagher, & Aguilar, 2010). Keo (2010) pointed to cultural competency and cultural sensitivity as potential solutions to the barriers facing schools in forming family-school partnerships for students with disabilities from CLD families. The current research on this topic, however, focuses primarily on Hispanic and African American families, with a few studies addressing the unique views of Asian families (e.g., Lo, 2008). This study will add to the literature and focus on the experiences and perceptions of families from the MENASWA backgrounds.

**Culture and Cultural Stigmatization**

Many CLD families find the notion of disability stigmatizing (Harry, 1992a; 1992b; Lo, 2008; Puig & Recchia, 2012). Children with disabilities from CLD groups have faced historically grounded prejudices and stigmas from having a child with a disability. These stigmas cause mental and psychological harm to CLD parents who have a culturally different conception of what it means to have a child with disabilities (Wenner, 2012). There are socio-cultural confusions, miscommunications, and misunderstandings between CLD parents of children with disabilities and U.S. school systems (Lo, 2008).

Those whose ethno-cultural beliefs, values, and norms are different from the majority of individuals in the United States can become targets for further stigmatization. Abdullah and Brown’s (2011) cross-cultural research examined the differing cultural norms, values, and beliefs about the stigmatization of mental illness for Americans of American Indian, Asian, African, Latino, Middle Eastern, and European descent. The results indicated that Asian Americans and African Americans placed much emphasis on the cultural values regarding social stigma towards those with disabilities. A study by Donovan (2013) had similar results for the Middle Eastern population showing that parents tend to hide children with disabilities due to stigmatization. Arabic cultural norms dictate that people with disabilities have to be looked after for their whole life as they do not get marriage partners (Donovan, 2013).

Ciftci, Jones, and Corrigan (2013) made an important distinction between “stigma” and “label avoidance” (p. 21) within the Muslim community. Their explanation can help researchers and educators better understand how stigma functions in the MENASWA community. Public stigma refers to the various forms of discrimination that restrict individuals from proper access to jobs, housing, education, and health care. Label avoidance, on the other hand, is when persons or parents of children with disabilities refuse to seek out needed psychological and medical health assistance. This includes not wanting to associate with anyone in the U.S. mental health care system (i.e., clinicians and physicians) for fear of further social stigmatization (Ciftci et al., 2013). Research has shown that CLD family members, as well as their children with disabilities,
experience increased emotional distress and social isolation due to both social stigmatization and label avoidance (Green, 2003; Yanni, Copeland, & Olney, 2010).

**Cultural Consequences of Ableism**

Ableism is the systematic discrimination against people with disabilities (Weeber, 2000). Hehir (2005) defined ableism as a pervasive and harmful cultural attitude that holds up able-bodied individuals as superior, and consequently leads to the marginalization of students with disabilities. Social inequality in education has a long history and is deeply rooted in the social construction of identity, as well as our categories of “difference” (Kozleski & Thorius, 2014).

Within the social model of disability, which describes how disability is viewed by a society, many factors come into play (Dunlap, 2015; Titchkosky, 2006). One is that families from other cultures may not know the historical or legal reasons that students with disabilities in the United States are increasingly served in general education classes or why there is an expectation of collaboration between families and the school. Another factor that needs to be considered is how ableism may be impacting MENASWA families who have children with disabilities.

The disadvantages that result from ableism significantly impact MENASWA students with disabilities who suffer from cultural attitudes and policies where they are required to be “normal” and similar to their peers in a multitude of ways. These children not only have a disability, they also have a different language and culture than their peers. They may have experienced war or other traumatic events, and they may come from a family who views their disability as a stigma. Overall, without adequate research on the MENASWA population in the context of disability, special education programs serving this population risk developing programs that lack cultural competence. If special educational personnel lack awareness of the cultural framework and unique characteristics of the MENASWA population, establishing effective family-school collaboration may be hindered.

**Methods**

**Research Question**

This study was part of a larger research project focused on various aspects of the experiences of MENASWA families and special education. Though there were multiple constructs involved in the overall research project, this particular article is focused on the following research question:

*What impact do various demographic factors of MENASWA families have on the families’ perception of the school’s cultural competency and valuing of their culture by special education personnel?*

**Study Design**

While some of the complicated problems impacting families can be quantified through survey questions, the complexity and subtlety of how MENASWA families interact with a school system also made qualitative research a good candidate to distill the complexity into more manageable parts. Therefore, in order to examine the experiences of families that form the focus of this research and derive valid estimates regarding generalized relationships, a mixed methods inquiry was adopted. Specifically, a Sequential Explanatory mixed methods design was used to complete two sequences of data collection (Creswell, 2002; Tashakkori & Teddlie, 1998). A Sequential Explanatory methods design helped researchers to gain insight about this population’s experiences, determine significant correlations to
relevant demographic factors, and identify the importance of educators’ cultural competence as perceived by MENASWA families.

In Sequential Explanatory Design, the investigator uses a two-sequence design in which the quantitative data is collected first, followed by qualitative data collection including open ended sections which allow participants to provide their comments (Creswell & Plano Clark, 2007). Quantitative inquiry was chosen because the descriptive and correlational approaches were the most appropriate for research about the experiences of families in this study. Qualitative inquiry enabled a probe into the narrative responses provided by families on the survey to help explain the quantitative responses.

For sequence one, a survey was utilized as the primary instrument for data collection. Hosted on Survey Monkey, the survey was crafted, designed, and developed based on a thorough review of the literature to gather information and add knowledge related to the perceptions of Middle Eastern, North African, and Southwest Asian (MENASWA) families of children with special needs in the United States. A pilot version of the survey was field tested, and the results were analyzed for reliability. Furthermore, feedback from respondents in the pilot study were used to improve the final survey. All responses included in this current study were taken from the final survey, which was not changed during the data collection period.

For sequence two, which was the qualitative part of this study, the research was framed from a phenomenological perspective. Researchers collected and analyzed data from open-ended questions on the survey. Ten qualified participants from different nationalities, cultures, religious backgrounds, and gender were interviewed, based on a consistent interview protocol.

**Population of Study**

In order to participate in the survey research, respondents had to be 18 or older, currently live in the United States, have a child or family member with special needs who had been served by the special education system in the United States during the past 10 years, and be a member of a community that is either immigrant or has a family of origin from a country, region, and/or ethnic or religious minority group considered to be part of MENASWA. Since there is no standardized map that defines MENASWA, survey participants were provided with the World Bank (2016) definition of Middle East, North Africa, and Southwest Asia regions. This study was intended to be inclusive of all families who have ties to these regions, therefore all nationalities and ethnicities that self-identified as being from the Middle East, North Africa, and Southwest Asia were encouraged to take the survey.

**Setting**

For a higher response rate, various venue types were used to garner interest in the study and to disseminate the survey itself. The initial settings of this research included schools located in regions and areas that MENASWA immigrants or populations of descent were known to be living throughout the United States. Regional centers for families of students in Pre-Kindergarten were one of the greatest resources for settings, because Regional Centers closely deal with families of children with special needs from the age of three. Adult Day Health Care centers (ADHCs) and Community Based Adult Services (CBAS) facilities were also part of the setting in order to survey grandparents.
who shared some responsibilities related to the education of the child with disabilities. **Sampling**

Due to the nature of this study, both random, non-convenience/probability sampling and non-probability sampling (snowball) approaches were used due to the hard-to-find population often missing entirely in an educational system’s data base. Addresses and email addresses were obtained via community organizations or through a school’s special education services (with permission from the district). The first sampling frame in the quantitative sequence of this research was non-random sampling, which was based on geographical region. All the areas with higher geographic density of the MENASWA population were identified and individuals and organizations were informed and asked to participate if they met the criteria. In order to increase the number of participants, the researchers also utilized social media to publicize the study. The second sampling frame in the quantitative sequence of this research was random sampling. A matrix of schools around the nation was created and 120 schools were randomly selected. Special Education units of those schools were informed about this study via email invitations. Directors of Special Education were emailed directly and invited to help families of MENASWA in their districts who met the criteria to participate in this study.

For the qualitative aspect of the study, a diverse group of 10 individuals was selected to help generalize the results to a diverse MENASWA population. The group included: A Jewish mother of two students with learning disabilities; a mixed family of an Iranian mother and American/Indian father of a girl with autism; a Lurish mother of a boy with autism; a Persian father of a daughter with an emotional and mental disability; an Assyrian grandfather of a child with attention-deficit disorder; an Azari mother of a girl with a chronic physical illness; a Kurdish mother of two boys with social difficulties and other health impairments; an Armenian mother of a girl with learning disorders; and an Arab mother of a boy with a learning disability.

Seven of the interviews were translated and transcribed, while three of them were conducted in English. The words were adjusted to maintain semantic equivalence in both languages (Harkness et al., 2010). **Instrumentation**

**Survey.** The survey was 66 questions in length. There were 17 demographic questions about the respondent and 12 demographic questions about the respondent’s related student. The survey also included 6 questions which asked respondents to select their level of agreement with statements that measured the respondent’s perception of their school’s cultural competency using a 5-point Likert-item format. The remaining questions – related to other constructs not directly measuring respondent’s perception of the school’s cultural competency – have been excluded from the present study. The following are the six questions from which the respondent’s perception of their school’s cultural competency were measured:

1. My related child’s school has offered me appropriate translation services before scheduling important meetings.


| 2. My related child’s school has given me information about organizations and family networks that offer support for families that are from my culture/religion. |
| 3. My related child’s special education team knows about my culture/religion. |
| 4. My related child’s special education team has a positive view of my culture/religion. |
| 5. My related child’s special education team shows respect for my culture/religion. |
| 6. My related child’s special education team has never discriminated against me due to my culture/religion. |

**Interviews.** Qualitative research was conducted through the use of open-ended questions and interview methodology. A semi-structured interview questionnaire was prepared. The design of the qualitative aspect of this study involved a multiple case study, phenomenological approach. Qualitative research is appropriate for this topic because this method is used to “...understand and interpret phenomenon as they occur in natural settings” (Hendricks, 2009, pp. 2-3). The research questions were looking at the specific points of view of MENASWA immigrant families of children with disabilities in the specific context of a school system.

In order to be able to conduct the interviews with family members, the researchers had to build trust by “...create[ing] a shared background prior to interviewing” and “encourage[ing] the case study to speak up openly about her/his experiences” (Rubin & Rubin, 2005, p. 92). The first author, a native speaker of Kurdish and Farsi languages, asked each interviewee for consent during digital tape recording. She transcribed the interviews verbatim from the audiotape into script form, and asked each interviewee to look it over for any further clarifications. Table 1 depicts the interview protocol that was created to probe deeper into why participants may have responded a particular way to certain questions on the quantitative survey.

**Data Analysis**

The independent variables in this study were constructed from the responses to demographic questions. A total of 24 independent variables were included in the analysis. These variables are shown in Tables 2 and 3. The dependent variable, perception of school’s cultural competency, is a Likert-scale constructed by taking the average response to the six questions that were previously listed.

A total of 267 surveys were submitted. Surveys were considered incomplete and excluded from the analysis if they did not complete at least one question measuring the dependent variable. Surveys were also excluded if the respondent clearly indicated a lack of eligibility for the survey by, for example, stating that they do not have a child or family member with special needs or that the related child has not been served by the special education system in the United States within the past 10 years. A total of 125 surveys were retained for the data analysis.

The general goal for the analysis of the survey data was to determine if there are any statistically significant relationships between the perception of school’s cultural competency (dependent variables) and the measured demographics. Hypothesis tests were conducted on a single variable basis due to the high degree of collinearity between independent variables. “False discovery rate” p-value correction was
applied to mitigate the increased likelihood of a Type I error when conducting multiple hypothesis tests on the same dataset. This method is similar to that described by Benjamini and Yekutieli (2001). Based on the characteristics of the dependent variable distribution, categorical independent variables were tested against the dependent variable using the Kruskal-Wallis rank-sum test, and non-categorical independent variables were tested using standard single linear regression (t-test).

Table 1

<table>
<thead>
<tr>
<th>Interview Question Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview protocol for qualitative part of “Families of Children with Special Needs” study</strong>*</td>
</tr>
<tr>
<td><strong>Your Demographic Information</strong></td>
</tr>
<tr>
<td>Gender, Country of birth, Primary home language, Religion, Relationship to the child</td>
</tr>
<tr>
<td>Racial/ethnic classification (on Government form)</td>
</tr>
<tr>
<td>Your preferred racial labeling and reason for the preference</td>
</tr>
<tr>
<td>Highest level of education, Immigration status, Hardships in immigration,</td>
</tr>
<tr>
<td><strong>Your related student’s demographic</strong></td>
</tr>
<tr>
<td>Gender, Country of birth, Primary home language, Religion Country of birth:</td>
</tr>
<tr>
<td>Racial/ethnic classification (on Government form)</td>
</tr>
<tr>
<td>Your preferred racial labeling and reason for the preference</td>
</tr>
<tr>
<td>Highest level of education, Immigration status</td>
</tr>
<tr>
<td>Effects of Hardship in Immigration, War, or humanitarian disasters on your related child’s disability (if applicable)</td>
</tr>
<tr>
<td>Special needs /nature of disability</td>
</tr>
<tr>
<td><strong>Interview Questions related to cultural competencies</strong></td>
</tr>
<tr>
<td><strong>School/staff cultural competency</strong>: How do you evaluate your related child’s special education team and their knowledge about your culture/heritage/religion?</td>
</tr>
<tr>
<td><strong>Challenges</strong>: What problems, if any, have you had with your related child’s special education program in the United States?</td>
</tr>
<tr>
<td><strong>Suggestions for improvement</strong>: What recommendations do you have to improve your related child’s special education program in the United States?</td>
</tr>
</tbody>
</table>

*For purposes of space, questions have been collapsed in the table

Results

Quantitative Analysis of Survey Data

Four demographic factors were found to be significantly correlated with participants’ perceptions that a school was culturally competent and considerate of the specific needs of the MENASWA population. Significant differences were found in the responses related to (a) the English proficiency of respondents, (b) whether the respondents consider English a primary language, (c) across the age of respondents, and (d) across the household income of respondents. Specifically, responses of lower cultural competence occurred more frequently for respondents with lower English proficiency, higher age, lower income, and/or those who did not consider
English their primary language. The results of significance testing are summarized in Table 2 and Table 3 for categorical independent variables and non-categorical independent variables respectively. A selection of participant characteristics is included in Appendix I.

Table 2

Summary of Kruskal-Wallis Rank-Sum Test for Significance of Differences in Perception of School’s Cultural Competency (Construct Between Groups in Categorical Independent Variables)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Variable</th>
<th>df</th>
<th>$\chi^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent</td>
<td>Gender</td>
<td>1</td>
<td>1.97</td>
<td>0.160</td>
</tr>
<tr>
<td>Respondent</td>
<td>Region born</td>
<td>5</td>
<td>12.89</td>
<td>0.024</td>
</tr>
<tr>
<td>Respondent</td>
<td>English is a primary language</td>
<td>1</td>
<td>11.58</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>Respondent</td>
<td>Religion</td>
<td>3</td>
<td>1.36</td>
<td>0.715</td>
</tr>
<tr>
<td>Respondent</td>
<td>Preferred race</td>
<td>2</td>
<td>2.06</td>
<td>0.357</td>
</tr>
<tr>
<td>Respondent</td>
<td>Educational attainment</td>
<td>9</td>
<td>15.77</td>
<td>0.072</td>
</tr>
<tr>
<td>Respondent</td>
<td>Has received some education</td>
<td>1</td>
<td>4.18</td>
<td>0.041</td>
</tr>
<tr>
<td>Respondent</td>
<td>Refugee/asylee</td>
<td>1</td>
<td>0.55</td>
<td>0.459</td>
</tr>
<tr>
<td>Respondent</td>
<td>Citizenship status</td>
<td>1</td>
<td>0.22</td>
<td>0.637</td>
</tr>
<tr>
<td>Student</td>
<td>Relation to respondent</td>
<td>3</td>
<td>3.19</td>
<td>0.363</td>
</tr>
<tr>
<td>Student</td>
<td>Gender</td>
<td>2</td>
<td>2.90</td>
<td>0.235</td>
</tr>
<tr>
<td>Student</td>
<td>Race</td>
<td>2</td>
<td>1.59</td>
<td>0.451</td>
</tr>
<tr>
<td>Student</td>
<td>Highest grade attained</td>
<td>6</td>
<td>5.77</td>
<td>0.450</td>
</tr>
<tr>
<td>Student</td>
<td>English proficiency</td>
<td>6</td>
<td>3.57</td>
<td>0.735</td>
</tr>
<tr>
<td>Student</td>
<td>Hardship prior to immigration</td>
<td>1</td>
<td>3.71</td>
<td>0.054</td>
</tr>
<tr>
<td>Student</td>
<td>Has entered special education program</td>
<td>1</td>
<td>1.33</td>
<td>0.250</td>
</tr>
</tbody>
</table>

*Note.* df = degrees of freedom; $\chi^2$ = Chi-square statistic; P = probability value. P < 0.01 is considered significant and shown in **bold**.
Table 3
**Summary of Single Regressions of Perception of School’s Cultural Competency with Non-Categorical Independent Variables.**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Variable</th>
<th>B</th>
<th>SE(B)</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent</td>
<td>Age</td>
<td>-</td>
<td>0.0071</td>
<td>-</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>English proficiency</td>
<td>0.199</td>
<td>0.0715</td>
<td>2.79</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td>0.134</td>
<td>0.0485</td>
<td>2.76</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td></td>
<td>Immigration year</td>
<td>0.003</td>
<td>0.0098</td>
<td>0.46</td>
<td>0.721</td>
</tr>
<tr>
<td></td>
<td>Difficulty of immigration</td>
<td>-</td>
<td>0.0988</td>
<td>-</td>
<td>0.064</td>
</tr>
<tr>
<td>Student</td>
<td>Age</td>
<td>-</td>
<td>0.0129</td>
<td>-</td>
<td>0.031</td>
</tr>
<tr>
<td>Student</td>
<td>Age special need noticed</td>
<td>-</td>
<td>0.0235</td>
<td>-</td>
<td>0.035</td>
</tr>
<tr>
<td>Student</td>
<td>Age entered special ed. program</td>
<td>-</td>
<td>0.0330</td>
<td>-</td>
<td>0.573</td>
</tr>
</tbody>
</table>

Note. Regression constants are omitted. B = unstandardized coefficient of the independent variable; SE(B) = standard error of B; t = t-statistic; P = probability value

P < 0.01 is considered significant and shown in bold.

**Qualitative Analysis of Interviews**

Six of the 10 interviewees reported that they did not feel their culture was respected by their child’s school, while four did. Eight reported being actively involved in their children’s education, and three stated that they would be willing to contribute their knowledge and their skills and professions to help the school, if only they were asked. Six of the 10 interviewees believed that their child’s school was not culturally competent, nor did it use culturally relevant pedagogy.

When asked their perception regarding their school’s cultural competency and if their MENASWA culture was respected by special education personnel, only one participant reported being asked by her school to help with cultural understanding. Two people reported stereotyping occurring at their school based on their cultural background, and one commented on microaggressions happening in the school toward individuals of MENASWA descent. Four respondents reported their negative views regarding the IEP process and its lack of inclusion and true collaboration, and one comment was made regarding the need to have co-teaching in Special Education programs as a means to provide additional cultural competency in the classroom.

**Discussion and Recommendations**

What do these results mean for educators, researchers, school personnel, and teacher education programs? When assisting schools to work with MENASWA families of children with disabilities through the creation of professional development or training programs, it will help to keep in
mind the variables that correlated significantly with the family’s perception of cultural competence. While the literature has shown that the development of cultural competence can aid CLD families in their family/school partnerships, knowing which variables might more negatively impact that relationship or perception of cultural competence will be valuable. Schools can be encouraged to reach out more actively to those families who might be disenfranchised for factors above and beyond the MENASWA status, due to additional age, income, or language barriers. When working with families who might struggle with issues such as language, income, or even have an older parent or grandparent involved, educators can recognize these as additional considerations that warrant reaching out further to learn more about the culture and needs of these families.

More than half (60%) of the MENASWA respondents in this study had a negative view of the IEP process, and 70% felt powerless in their role to promote changes or improvements to the system. As such, they strongly recommended that all individuals and groups involved in the IEP and other educational system processes should be further educated and trained so that their level of cultural competency (i.e., their ability to teach students from a culture different than their own) can be greatly increased. Teachers and school administrators need to develop culturally-sensitive interpersonal awareness and skills to tear down many of the barriers erected due to cross-cultural misunderstanding and miscommunication. Educators need to have at least a fundamental knowledge and understanding of cultural and linguistic diversity, as is reflected in fully immersive and inclusive learning environments. In order to better accommodate MENASWA or a broader student body of culturally and linguistically diverse families, including those with disabilities, school teachers across the United States need further continuing education so that they can learn about culturally relevant pedagogy, theory, and practice.

One of the most effective strategies to address the numerous problems associated with the variety of learning needs that CLD – and in this study MENASWA – English learners face in the classroom is to implement what experts call culturally relevant pedagogy. When pedagogues speak of culturally relevant or responsive teaching strategies and instructional guides, they are referring to a wide variety of strategies and practices. These strategies draw from the cultural perceptions, experiences, beliefs, and attitudes of a class. Such culturally sensitive practices are essential for creating a learning environment that is more relevant and effective for students from culturally diverse backgrounds (Banks & Obiakor, 2015; Montalvo, Combes, & Kea, 2014; Toppel, 2015). School leaders need to know that some MENASWA children’s experiences will not mimic those who have lived in a relatively safe, suburban neighborhood all their lives; their unique situation warrants an understanding by all educators who may work with them and their families. These are the specific demographic, cultural, language, and experiences that require a better understanding of the MENASWA population so that they can be best served through the U.S. special education programs.

Knowing some characteristics about the MENASWA region and cultural dynamics of those from MENASWA descent that may impact the classroom experience
will help any educators working with this population. These characteristics and dynamics may include the importance of family and community, the difficulties of stigmatization of having a child with disability, the inaccurate stereotype of all MENASWA being Muslim, and the significant number of newcomers affected by war who are at additional risk for a range of mental health issues resulting from their traumatic experiences (Sirin & Rogers-Sirin, 2015). Strategies that derived from survey responses that can help with culturally relevant pedagogy include improving communication practices, supporting family counseling needs, improving IEP processes, embracing culturally-based co-teaching, and providing professional development on cultural competence.

**Improving Communication Practices**

Despite the fact that the majority of MENASWA families in the quantitative data reported that they appreciated the Special Education system that was helping their children, many families still raised concerns about the methods of communication occurring with schools. Families suggested changes in Special Education and school structures in relation to communication with MENASWA. Based on the data, it appeared that most respondents were primarily concerned about the language used in meetings and in paperwork. This mirrors difficulties already documented in the literature.

Abadeh (2014) found that Arab American parents of children with disabilities who attended schools in the U.S., especially those parents born outside the United States, expressed various difficulties and problems when it came to communicating with teachers and educators about their children’s unique needs and requirements. Differences in language and cultural factors were identified as two categories that caused miscommunication and misunderstandings between teachers and Arab American parents. These can be extrapolated to most MENASWA families with language issues.

To address this issue of communication, one of the interviewees who is also a social worker and an advocate for individuals with disabilities, as well as was directly involved with the education of a MENASWA student with a disability, offered a suggestion. She suggested the use of “Low Register” communication between schools and families of student with disabilities. She said, “The [IEP] team sometimes speak so professionally, thinking the parents get it if they put it that way. I have to let the school team know to use something we call ‘low register’ in interpreting, which means ‘let’s go easy. Let’s use a simple language.’” Low register communication is more common in the field of linguistics, and is not a common term in education. However, the idea of providing MENASWA and other CLD families a more informal context for IEP meetings, an avoidance of jargon, time for processing and questions, and more simplistic language, definitely seems to address the needs expressed by the MENASWA families in this study and is consistent with other research on communicating with families.

**Supporting Family Counseling Needs**

Another support identified by MENASWA families in this study was the need to have someone to talk to about their unique experiences. For example, one interviewee reported that she struggled “not knowing the language, losing feeling and information through translation,” but her biggest challenge was “not having someone for me as a single mom who ran away from her country for her daughter...
was hardest ever.” She wanted to have someone who would understand her situation and talk about her daughter and her needs. Having a professional with a MENASWA background in counseling services who also has some knowledge of experiences that arise in situations in the MENASWA regions including war, loss of family members, political imprisonment, and discrimination would be incredibly beneficial.

**Improving IEP Processes**

The data from both qualitative and quantitative aspects of this study reinforced that language and communication between the Special Education programs and families of MENASWA children with disabilities should be simpler and more understandable to the population. Respondents raised numerous concerns about communication and language barriers, specifically mentioning the way that schools run IEP meetings. They didn’t understand the process, the documents or the expected outcomes, despite the fact that many of the interviewees were highly educated. Instead, most of the interviewees and many of the individuals who shared their perspective through open-ended comments, advocated for an alternative perspective on IEP meetings, one that would change the current way of doing things. This might include shorter but more frequent meetings, a more informal environment, fewer formal assessments, and most definitely, documents translated into a family’s primary language.

**Embracing Culturally Based Collaboration and Co-teaching**

Prior research about co-teaching indicates that it is one of the more common strategies for meeting the needs of students with disabilities to increase their academic achievement (Murawski & Lochner, 2018). Some participants in this study recommended having a teacher or a teacher assistant in the classroom who is either from MENASWA or is familiar enough with MENASWA cultures as a way to bridge the gap between schools and the MENASWA community. Murawski (2010) emphasizes that one of the key elements for successful co-teaching is a bringing together of different expertise; this would be true of bringing together a teacher from the majority culture and one from the MENASWA culture. Participants of this study suggested that by having culturally based co-teaching, schools can also increase the ethnic diversity among Special Education faculty and staff. One interviewee expressed that “it will be great if the teacher has a TA from us, will be helpful for the teacher and for us.” Her statement shows that even having a teacher’s assistant, as opposed to an actual co-teacher with a teaching certificate, would be better than no representation from the MENASWA population at all.

**Providing Professional Development on Cultural Competence**

The majority of respondents believed that their child’s school was not culturally competent, nor did it use culturally relevant pedagogy. Furthermore, 70% of families who were interviewed stated that their school lacked knowledge about their cultural aspects and journey and indicated that they wanted teachers to be more culturally competent. They thought that teachers should have Professional Development to understand MENASWA needs. Landa (2011) encourages educators to become more familiar with cultural competency and cultural proficiency to be able “to successfully serve children and youth from all of the cultural backgrounds represented within the school population,
and in particular, those students who are growing up in non-dominant cultural contexts (those from racially/ethnically, linguistically, or economically marginalized groups)” (p. 6).

When training teachers in areas of cultural competency, it is critical to include strategies that would increase a sense of trust between parents and teachers. Competence trust is concerned with trust among organizations (Isaacs, Valaitis, Newbold, Black, & Sargeant, 2013). Seven of the 10 individuals interviewed believed that different levels of cultural competency had an impact on the level of trust and collaboration between them and the school. Survey results furthermore suggested that cultural competency education throughout the school system including teachers, administrators, and paraeducators would be helpful in establishing trust and improving communication. Teacher training programs could share inclusive educational programs that incorporated strategies focused on competence trust and cultural competence, which could then be applied in contexts involving families from MENASWA backgrounds who have children with disabilities.

References


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Appendix I: Participant Characteristics and Demographics

Respondent demographics

Age, gender. The age distribution of those surveyed, shown in Figure A.1, was centered at a mean age of 46.7 years (SD = 13.5). The age range of the sample was 20 to 86 years-old with no features significantly different from the expected age distribution. The proportion of individuals responding as female was 61.6% with the remaining 38.4% responding as male.

![Age Distribution of Respondents](image)

*Figure A.1. Age Distribution of Respondents*

Geographic background and immigration. The sample represented individuals born in 22 different countries/regions. The United States was the country of birth for 39.2% of respondents, the most common country within the sample. This was followed by Iran with 28%, and Iraq with 8.8% of the sample overall. The frequencies of the remaining regions are summarized in Table A.1.

<table>
<thead>
<tr>
<th>Country or Region of Birth</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>49</td>
<td>39.2</td>
</tr>
<tr>
<td>Iran</td>
<td>35</td>
<td>28.0</td>
</tr>
<tr>
<td>Iraq</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Kurdistan</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Kuwait</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>India</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Israel</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Immigrants accounted for 60.8% of the respondents. The mean year of immigration was 1995 (Median = 1997, N=71). The distribution of immigration year, shown in Figure A.2, is multimodal with the most frequent years occurring from 2000-2005, 2005-2010, and 1975-1980. The majority of immigrants in the sample, 81.6% (N=62,) were naturalized citizens. Respondents who reported that they, or their family, immigrated to the United States as refugees or asylees made up 27.8% of immigrants (16.0% of all respondents).

Figure A.2. Distribution for Year of Immigration of Respondents

Religious background. Respondents were asked about both their own religious identification and that of their family’s background. Only the family background was considered in the analysis; the former question served to reduce the likelihood that an individual stated their personal religious identification as opposed to that of their family background by providing a distinct question for each. As summarized in Table A.2, Muslim religious backgrounds accounted for 42.3% (N=97) of the sample, Christian religious backgrounds (including all denominations) accounted for 30.9%, Jewish religious backgrounds constituted 15.5%, and the remaining 11.3% included those indicating either no religious background or another religion.

<table>
<thead>
<tr>
<th>Religion</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim</td>
<td>41</td>
<td>42.3</td>
</tr>
<tr>
<td>Christian</td>
<td>30</td>
<td>30.9</td>
</tr>
<tr>
<td>Jewish</td>
<td>15</td>
<td>15.5</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Table A.2
Religious Background of Responders
Language proficiency. English language proficiency of the respondents (Table A.3) was relatively high with approximately 61% (N=123) of those surveyed reporting an English proficiency of “Full Professional Proficiency” or better and only 8.1% of respondents reporting “Elementary Proficiency” or lower. Respondents were also asked to indicate the language or languages that they considered to be a primary language for themselves. English was included as a primary language by 47.1% (N=121) of the respondents.

Table A.3

*English Language Proficiency of Respondents*

<table>
<thead>
<tr>
<th>English Proficiency Level</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - Native or Bilingual</td>
<td>28</td>
<td>22.76</td>
</tr>
<tr>
<td>4 - Full Professional</td>
<td>47</td>
<td>38.21</td>
</tr>
<tr>
<td>3 - Professional Working</td>
<td>21</td>
<td>17.07</td>
</tr>
<tr>
<td>2 - Limited Working</td>
<td>17</td>
<td>13.82</td>
</tr>
<tr>
<td>1 – Elementary</td>
<td>7</td>
<td>5.69</td>
</tr>
<tr>
<td>0 – None</td>
<td>3</td>
<td>2.44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Racial identity. Respondents were first asked to select the race that they currently mark to describe themselves on government forms, and then they were asked to mark the selection that describes them best, given additional options. When given the options that are present on government forms (e.g., the Census), 60% of responders indicated that they identify as “White”. Given the additional three options of “Middle Eastern,” “North African,” and “Southwest Asian,” the rate at which responders chose “White” reduced to 22.4%. Overall, the most common selection among the alternative choices was “Middle Eastern” with 37.6% (N=47) of the overall sample. Of those that chose Middle Eastern, 74.4% (N=35) had previously identified as White. The full comparison of the racial identification of respondents given additional options is shown in Table A.4.
Table A.4

*Comparison of Reported Racial Identity Given Typical and Additional Options*

<table>
<thead>
<tr>
<th>Given the following additional options, which best describes your racial/ethnic identity?</th>
<th>On government forms, which of the following do you currently mark to describe yourself?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asian</td>
</tr>
<tr>
<td>Asian</td>
<td>5.6%</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>0%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>0%</td>
</tr>
<tr>
<td>“I choose not to answer”</td>
<td>0%</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>0%</td>
</tr>
<tr>
<td>North African</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0.8%</td>
</tr>
<tr>
<td>Southwest Asian</td>
<td>1.6%</td>
</tr>
</tbody>
</table>
Income and education. Responders with a household combined income of $75,000 and above made up 50% (N=108) of the sample. The sample also included a relatively high proportion of individuals with post-secondary education. Attainment of a bachelor’s degree or higher was 65% (N=120) within the sample and 73.3% of respondents stated that they have received some education in the United States. Educational attainment of the respondents is shown in Table A.5, followed by combined household income in Table A.6.
Table A.5

Educational Attainment of Respondents

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Has the respondent received some education in the USA?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Yes</td>
<td>Total</td>
</tr>
<tr>
<td>Associate degree</td>
<td></td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td></td>
<td>3</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Doctoral degree/Ph.D.</td>
<td></td>
<td>1</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>High School Diploma or Equivalent</td>
<td></td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Master's degree</td>
<td></td>
<td>5</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Primary School</td>
<td></td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Professional degree (MD, JD, etc.)</td>
<td></td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Some college</td>
<td></td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### Table A.6

**Combined Household Income of Respondents**

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $25,000</td>
<td>17</td>
<td>15.74%</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>10</td>
<td>9.26%</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>12</td>
<td>11.11%</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>15</td>
<td>13.89%</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>20</td>
<td>18.52%</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>21</td>
<td>19.44%</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>13</td>
<td>12.04%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>108</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Note.** % = percentage relative to row total. Row % = percentage relative to row total. n = cell count.

### Student demographics

The student-centered data considered the target student about whom the family member responded as the demographic subject. While most respondents were considering only one student, a few answered questions about multiple students.

**Relationship to respondents.** The most common relationship of respondent to each individual student about whom they were filling out the survey was that of mother at 59.0% (N=95). Table A.7 summarizes the relationship of respondents to students.
Table A.7

Respondent Relationship to Student

<table>
<thead>
<tr>
<th>Relation</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td>22</td>
<td>23.16</td>
</tr>
<tr>
<td>Grandparent</td>
<td>7</td>
<td>7.37</td>
</tr>
<tr>
<td>Mother</td>
<td>56</td>
<td>58.95</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>10.53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>95</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Student age and educational attainment.** The average age of students in the sample was 14.9 years (SD=7.25) with a median age of 14 years and a range of 2 to 32 years of age. The distribution of age, shown in Figure A.3, was positively skewed and included a sizeable proportion of adults (31.5%) since responders were permitted to complete the survey detailing their experiences with special education regarding students of any age, as long as that student has not been out of school for more than ten years. Table A.8 shows the grade and educational attainment frequencies.

![Figure A.3. Distribution of Student Age](image-url)
Table A.8

*Highest Grade Attained by Students*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Count</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-kindergarten</td>
<td>8</td>
<td>9.64</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>First</td>
<td>3</td>
<td>3.61</td>
</tr>
<tr>
<td>Second</td>
<td>2</td>
<td>2.41</td>
</tr>
<tr>
<td>Third</td>
<td>3</td>
<td>3.61</td>
</tr>
<tr>
<td>Fourth</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>Fifth</td>
<td>9</td>
<td>10.84</td>
</tr>
<tr>
<td>Sixth</td>
<td>3</td>
<td>3.61</td>
</tr>
<tr>
<td>Seventh</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>Ninth</td>
<td>7</td>
<td>8.43</td>
</tr>
<tr>
<td>Tenth</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>Eleventh</td>
<td>6</td>
<td>7.23</td>
</tr>
<tr>
<td>Twelfth</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>Higher Education</td>
<td>10</td>
<td>12.05</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>10.84</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Student gender, race, and English proficiency.** The frequencies for the gender, race, and English language proficiency of students in the sample are summarized in Table A.9. The language proficiency of the target students was approximately uniformly distributed and included the option “Nonverbal” for cases where the concept of language proficiency may not have applied to the student. The most common choices for race selected by respondents for the student were “White” and “Middle Eastern.”

Table A.9

*Student Gender, Race, and English Language Proficiency*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Count</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Gender</td>
<td>Female</td>
<td>31</td>
<td>33.33</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>61</td>
<td>65.59</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1</td>
<td>1.08</td>
</tr>
<tr>
<td>Student Race</td>
<td>Total</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>31</td>
<td>33.70</td>
<td></td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>26</td>
<td>28.26</td>
<td></td>
</tr>
<tr>
<td>Southwest Asian</td>
<td>8</td>
<td>8.70</td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>6</td>
<td>6.52</td>
<td></td>
</tr>
<tr>
<td>Two or More Races</td>
<td>6</td>
<td>6.52</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>4.35</td>
<td></td>
</tr>
<tr>
<td>North African</td>
<td>4</td>
<td>4.35</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>4.35</td>
<td></td>
</tr>
<tr>
<td>Black/African American/African</td>
<td>3</td>
<td>3.26</td>
<td></td>
</tr>
</tbody>
</table>

| Total                        | 93    |            |

<table>
<thead>
<tr>
<th>English Language</th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Native or bilingual proficiency</td>
<td>18</td>
<td>20.69</td>
</tr>
<tr>
<td>Full professional proficiency</td>
<td>19</td>
<td>21.84</td>
</tr>
<tr>
<td>Professional working proficiency</td>
<td>10</td>
<td>11.49</td>
</tr>
<tr>
<td>Limited working proficiency</td>
<td>14</td>
<td>16.09</td>
</tr>
<tr>
<td>Elementary proficiency</td>
<td>18</td>
<td>20.69</td>
</tr>
<tr>
<td>Nonverbal</td>
<td>5</td>
<td>5.75</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3.45</td>
</tr>
</tbody>
</table>

| Total                        | 87    |            |

**Student entry into special education and disability due to hardship.** The mean age at which a student’s disability or special need was first noticed (“age noticed”) was 5.06 years of age (N=86, SD=3.98). The mean age at which students entered a special education program (“age entered”) was 5.68 years of age (N=53, SD=3.53) and overall, 21.3% (N=75) of students in the sample never entered a special education program, according to respondents. The distributions for “age noticed” and “age entered” are shown in Figure A.4.

Students who entered a special education program did so in 1.61 years (N=50, SD=1.90), on average, with most students (58%) entering within a year or less of being identified as having a disability. Actual average time until entering a special education program is likely to be higher than computed because most responses were given as discrete years, which underestimates
the time for students who entered at the same age as when their disability or special need was noticed.

The last variable measured for students was whether the respondent believed the student’s disability or special need was a result of the hardships endured prior to emigrating to the United States (e.g., war, natural or humanitarian disasters, poor living conditions, etc.). Approximately a third of responders (32.9%) selected “yes” to this question.

**Figure A.4.** Boxplots of Age Special Need First Noticed and Age Entered in Special Education Program