Beliefs and knowledge about stuttering vary amongst cultures, especially in relation to the supposed etiology and treatment for stuttering (Robinson & Crowe, 2002). Culturally sensitive treatment approaches take these beliefs about stuttering into account during the course of fluency therapy (Shapiro, 1999). Accordingly, it is of vital importance that research evidence documents the attitudes of a wide variety of cultures toward stuttering and PWS.

One study that documented cultural variations in attitudes was conducted by Bebout and Arthur (1992). They compared the attitudes of foreign-born students (from Asian and South American countries) with native North-American students. Participants responded to a 12-item questionnaire that addressed the characteristics of PWS, such as intelligence and emotional stability; whether PWS should seek professional help from doctors or other helping professionals; effects of stuttering on the life of an individual who stutters, including social relationships and employment opportunities; and how other people should act toward PWS. Group comparisons indicated that non-native North Americans were more likely to think that people with communication disorders are emotionally disturbed and could speak better if they tried harder. Bebout and Arthur concluded that it is important for SLPs to be aware of listeners' culturally influenced beliefs and attitudes.

While a growing number of studies continue to investigate diverse cultural attitudes toward stuttering (St. Louis, K. O., Andrade, C. R. F., Georgieva, D., & Troudt, F., 2005), relatively little is known about the perceptions of Arab populations (e.g., Abdalla & Al-Saddah, 2009; Abdalla and St. Louis, 2012).

Given the lack of research on Arab attitudes toward communication disorders as a whole, the purpose of this study was to (1) gather and report Arab attitudes toward voice, hearing, and fluency disorders; and (2) compare the results among disorders, to draw inferences about why some disorders may be viewed more positively or negatively compared to others by Arab populations. The study attempts to draw broad conclusions about the more universal nature of beliefs about communication disorders while contributing to an understanding of how Arabic cultural factors may influence such beliefs.

**Participants**
- 643 participants; 523 (55.5%) were students at Kuwait University and ranged in age from 18 years to 32 years
- 127 (44.2%) were members of the general public ranging in age from 35 to 78 years
- 50.5% men and 49.5% women
- 66% had an acquaintance who stutters
- All participants were fluent Arabic speakers.

**Survey Instrument**
- Adapted from Bebout and Arthur (1992):
  - negation added to statements 4 and 7 to minimize response bias
  - term “severe stutterer” was changed to “a person with severe stuttering” to use “person-first language”
  - a thirteenth statement “a person with severe stuttering can pursue their education in mainstream (regular) public schools” was added
  - A four-point Likert scale (i.e., strongly agree, agree, disagree, strongly disagree) used
- Administered to participants to determine attitudes toward stuttering, voice disorders and hearing impairment.
- The 13 items were translated into standard Arabic by two professional English-Arabic translators and the translation was then checked for accuracy by two independent bilingual linguists from Kuwait University.

**Data Collection and Analysis**
An adult male with severe bilateral hearing loss, an adult male with severe stuttering and a female with moderate Aphasia were individually audio-recorded (using a digital recorder Olympus DS-50) in a quiet room as he/she casually conversed with a clinician. Each clip lasted approximately one minute and 30 seconds. Participants listened to these audio speech samples before completing the survey.

Descriptive statistics were calculated to determine group means and standard deviations (Group 1 = Hearing Disorders; Group 2 = Voice Disorders; and Group 3 = Stuttering). Further, a one-way ANOVA was conducted to determine statistically significant differences between group responses for specific items on the Likert scale. Due to the large number of comparisons (13), a Bonferroni correction was applied and a more conservative alpha value of 0.004 was used.

**RESULTS**

The results of this comparative study assessing differences in attitudes reported for individuals with a hearing loss, voice disorder, and stuttering indicate that adults in Kuwait reported generally positive attitudes toward all three groups. However, significant group differences were noted on several items on the Likert scale. This indicates that the respondents were knowledgeable about different communication disorders but did not view all three disorders the same. For example, respondents on average reported more disagreement on item 8 (a person could have less problems if they tried harder) for hearing disorders. This indicates that participants were in general aware of the impact each disorder has on an individual’s functioning in different settings (school, for example). It is also interesting to note that a majority of participants agreed that people who stutter are more likely to be emotionally disturbed, followed by hearing disorders, and least for voice disorders. In general, the most positive trend was reported for voice disorders.

**REFERENCES**


