The Effects of Cultural Knowledge and Exposure on Speech and Language Assessments

A Pilot Study On The Effects of Culture on Clinician-Child Play-Based Interactions

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WHAT IS CULTURE?
- Culture is "the socially constructed and learned ways of believing and behaving that identify groups of people...verbal and nonverbal communication behaviors identify cultural groups" (Stockman, Boul, & Robinson, 2004).

WHAT IS CULTURAL AND LINGUISTIC COMPETENCE?
- Cultural and linguistic competence is defined as the "congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enable effective work in cross-cultural situations" (ASHA, n.d.).

HOW DOES CULTURAL AND LINGUISTIC COMPETENCE EFFECT SPEECH LANGUAGE PATHOLOGY?
- The knowledge of appropriate intervention, strategies, materials, and education include clients' culture, race, ethnic background, customs, traditions, religion, beliefs, lifestyles, and language(s).
- The American Speech Language Hearing Association (ASHA) recommends that SLPs develop cultural competence prior to working with individuals with cultural and/or linguistically diverse backgrounds (ASHA, n.d.). However there is no generally accepted protocol for assessing CLD populations (Schmidt & Sullivan, 2003; Pena & Bedore, 2011).

SIGNIFICANCE & KEY ISSUES
- Speech language pathologists (SLPs) are trained to provide individualized evaluation and treatment for people affected by communication impairments. As the demographics of society change, with increasing numbers of individuals who are culturally and linguistically diverse, the lack of cultural exposure and knowledge within the profession has led to issues in serving diverse populations, particularly in the area of assessment.
- A clinician who is unfamiliar with cultural norms may interpret a child’s behavior as a lack of comprehension of the task or a disorder in expressive language, rather than a culturally different response (Klinger, Blanchett, and Harry, 2009).

DATA USING SALT: MLU, TTR, & TOTAL UTTERANCES
- Systematic Analysis of Language Transcripts (SALT) is software that manages the process of eliciting, transcribing, and analyzing language samples. Quantitative and qualitative comparisons of language, non-verbal communication, and overall interaction for both the children and the clinicians will be made between the cultural match and cultural mismatch conditions.

DISCUSSION
- Results are inconclusive, as some match conditions resulted in greater language quantity and complexity, while others did not. Mismatch conditions had more language output.
- Increased production in mismatch conditions could be due to a lack of cultural understanding, as suggested by Terrell, Terrell, and Golin (1977).
- Less language is required when the child and the clinician have common experiences and do not need to provide as much context.
- Increased production in mismatch conditions were noted in older children, but differences between the match and mismatch condition were negligible.
- Coding in SALT eliminated any utterances in Hmong; further study is needed to determine how to incorporate these bilingual productions into language sampling and analysis.
- Future analyses are needed to determine the effects of cultural match and mismatch on non-verbal communication.

PRELIMINARY RESULTS DURING PLAY ACTIVITY WITH TOYS
- The data of the 4-year-old white child was omitted due to insufficient verbal output.

American Speech Language Hearing Association (ASHA) demographics show that 7% of members identify as coming from a racial/ethnic minority background and less than 6% identify as bilingual or multilingual (ASHA, 2002). There is an underrepresentation of professionals in the field from racial, ethnic, and linguistic minority groups (Walters & Geller, 2002).

METHODOLOGY
- Child participants: Participants included two Hmong female children (ages 6 & 4) and two White female children (ages 6.5 and 4.5). Both Hmong children spoke both English and Hmong in the home, while the White children spoke English only. All four children had normal hearing and vision per parent report; none of the children had previously received speech-language services.
- Clinicians: Two college-aged females students (ages 21 and 20) participated as clinicians; one was Hmong and one was White.
- Procedures: Participants completed play-based sessions comprised of three activities: conversation about a favorite movie or story, reading wordless picture books, and playing with toys. Each child participant completed one session with a culturally-matched clinician and a culturally-mismatched clinician.
- Language samples were analyzed for quantity and complexity using SALT.
- Gestural and behavioral analyses are underway for use of non-verbal communication and behaviors using a modified non-verbal coding system (Collins et al., 2011). Specifically, eight non-verbal communication behaviors will be coded from each video interaction: body lean, body position, postural change, facial expression, eye contact, affirmative gestures, un purposive movements, and hand gestures (Collins et al., 2011).

Mean Length of Utterance 6.26 6.07 Type Token Ratio 0.31 0.23 Total Utterances 98 total utterances 173 total utterances

The incidence of speech and hearing disorders are higher among ethnic and racial minority groups (Walters & Geller, 2002).

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