

### Letter to the Editor

## Do Individuals from Diverse Cultural and Ethnic Backgrounds Perceive Graphic Symbols Differently?

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Appropriate clinical and educational services in Augmentative and Alternative Communication (AAC) must be evidence-based (Schlosser, 2002), and the discipline must strive for high quality empirical research. Occasionally the interpretation of results is not appropriate to the specific research question/hypothesis of the study. In a study by Huer (2000), the research question was, 'Will adults from African-American, Chinese, European-American, and Mexican cultural/ethnic communities assign similar translucency ratings to symbols from the three target symbol set' (p. 181). The experimental task required the participants to assign the translucency ratings to DynaSyms, Picture Communication Symbols (PCS), and Blissymbols. The author systematically replicated an earlier study by Bloomberg, Karlan, and Lloyd (1990) with four different ethnic and cultural groups. The results, which were similar to those obtained by Bloomberg *et al.* (1990) indicated that participants perceived PCS to be the most translucent and Blissymbols to be the least translucent.

In the discussion section, Huer (2000) postulated that, "Culture/ethnicity has an impact on the translucency ratings assigned to symbols in three graphic symbol sets by participants in four groups. It appears from these data that individuals with different language and life experiences do not perceive graphic symbols in the same manner" (p. 183). Because the results, however, indicated that there is no interaction between ethnicity and symbol set, this conclusion is not based on the data. Rather, the appropriate answer to the research question is that the participants from the four different cultural/

ethnic communities assigned similar translucency ratings to each symbol set.

To make a judgment, based on the results of this study, that individuals from diverse cultural and ethnic groups perceive symbols differently is premature. Further investigation is required because, while individuals from diverse cultural and ethnic background might assign similar translucency ratings for a graphic symbol set, some symbols—particularly in the noun category—might not be represented (Nigam & Lloyd, 2001). The 41-word corpus used by Huer (2000) as stimuli had more verbs (26) than nouns (15). The lexical items in the noun category might be more culturally sensitive than verbs. Future investigations into the impact of cultural and ethnic background on translucency ratings of a graphic symbol set should use more noun items as stimuli than verb items, because graphic representation of nouns might be different than verbs. For example, graphical representations of the referent 'milk' might differ across cultures depending on how the product (i.e., milk) is packaged and distributed. In mainstream American culture, a carton or plastic bottle of milk is an appropriate representation of the referent. But such a graphical representation might not be appropriate (translucent) for the Pennsylvania Dutch Community, for example. On the other hand, the lexical items such as 'give' and 'open' represent actions and the graphical representation of action verbs might not differ across cultures.

In addition, the level of acculturation of the participants should not be ignored, particularly when they are first generation immigrants as in

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the Huer (2000) study. Individuals who are more acculturated to mainstream American culture might provide similar translucency ratings for graphic symbols compared to individuals who are less acculturated. In cross-cultural research, levels of acculturation should be measured using a reliable and valid acculturation scale. Various acculturation scales are available, such as The Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna & Khoo, 1992), that measures level of acculturation of Asian population; and the Marin and Marin Acculturation Scale ((Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987), which was originally developed for use with the Hispanic population and is now available for measuring acculturation levels of foreign born Chinese Americans.

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