

Personalise, Localise and Globalise: Symbols to enhance independent Communication

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1. Overview

This research explored the personal preferences of AAC users and those supporting them, in their need to have localised, cultural and religious symbols, that could be used alongside those already found on communication charts in certain multilingual settings.

2. Background

Many individuals with communication and literacy skill difficulties benefit from the use of symbol systems in order to express themselves [3]. The user becomes practiced at using a particular group of symbols that may be personalised to suit their skills and localised to represent their environment. However, it is rare to find freely available symbol sets that can be used to add specific cultural and religious images in languages such as Arabic [2]. This project aimed to develop a core vocabulary with symbols that represented Gulf Arabic culture, religion and local settings.

3. Methods

A participatory approach has been taken offering those who use alternative and augmentative communication (AAC), teachers, therapists and parents the chance to collaborate in the design and development of an Arabic Symbol Dictionary [1]. Word lists were collected and compared to general Arabic lists for frequency of use, literacy and language with a parts of speech comparison to English AAC lists in order to create AAC charts and to highlight morphosyntactic differences.

During the three years 63 participants in Doha also supported the symbol development with a series of voting sessions to gauge acceptance levels. Where voter ratings were more than 3.5 out of 5 symbols were published and where a rating of less than 3.5 out of 5 was given, symbols were re-designed using comment analysis. Once accepted symbols were made available online with further chances for feedback.

3.1 Ethical statement

Appropriate ethical approval was in place at both Hamad Medical Corporation and Southampton University.

4. Results

Each lexical entry was given a definition with a sample sentence and syllable division. Text to speech was made available with recorded phonemes in Arabic to aid pronunciation, to aid literacy skill development [4]. Over 700 symbols were developed and categorised by gender, number and parts of speech with similar categories found in other symbol sets. Participants requested the ability to further adapt symbols and this was achieved via an online application so that tenses, plurals and other attributes could be added. Speech and language therapists have used the symbols in communication charts, story boards, signage as well as interactive online charts to demonstrate the difference between English and Arabic. There has also been increased interest in the symbols for use with refugees.

5. Discussion

There are many differences between the morphosyntax and orthography of Arabic and English. The flexibility of Arabic makes text to speech difficult without diacritics and context, words rarely retain their same shape when used in a sentence as opposed to being seen in isolation. This impacts on the use of symbol labels on communication charts and how they are read out. There is also the need to personalise charts for different genders and particular regions within the Gulf where dialects are different and Modern Standard Arabic written language does not necessarily represent what is said in conversation. The use of westernised symbols fails to take into account the many social, cultural and religious nuances that make up Arabic daily life, but with this research it has been possible to create criteria for symbol development to clarify some of the issues that can arise.

6. Conclusion

The development of accurate lexical concepts to aid communication and literacy skills in a bilingual situation is a challenge. This research has shown personalisation and localisation remain a crucial element of AAC communication despite the globalisation of many aspects of our daily life.

7. References

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Speech and language, AAC, Alternative and Augmentative Communication, participatory design, symbols, literacy skills

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