Translation and Cross-Cultural Adaptation of the Quantitative Checklist for Autism in Toddlers Parental Questionnaire into Sri Lankan Tamil language

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Background: The Quantitative Checklist for Autism in Toddlers (Q-CHAT) is a parent-report screening tool to detect autism spectrum disorder (ASD) symptoms in toddlers aged between 18-24 months. Early detection of ASD increases the chance of receiving timely intervention. The parent report questionnaire is a good way to screen for ASD. The Q-CHAT is a novel screening tool that has demonstrated to have various benefits over conventional screening techniques, because there is a lack of screening tools for the early screening of ASD traits in the Sri Lankan Tamil clinical context.

Objectives: The objectives of this study were to translate and cross-culturally adapt the Quantitative Checklist for Autism in Toddlers Parental questionnaire into the Sri Lankan Tamil language.

Methods: At the initial step of this study, the Delphi study design was used to translate and cross-culturally adapt into the Sri Lankan Tamil language and a cross-sectional study conducted for psychometric evaluation. Following this, an appropriate sample was selected, which included 30 typically developing Tamil speaking toddlers aged between 18-24 months and 30 ASD Tamil speaking toddlers aged between 18-24 months. Cronbach's alpha coefficient was used to evaluate the internal consistency of the Tamil version of the Q-CHAT questionnaire. Furthermore, the Mann-Whitney U test was used to investigate whether the Tamil version of the Q-CHAT can adequately discriminate between typically developing toddlers and toddlers with ASD. Spearman's' rho correlation coefficient test was used to analyse the correlation between the background variables of toddlers with ASD and the Q-CHAT scores.

Results: The typically developing group consisted of 30 toddlers with the mean age of 20.17 (SD=1.44) months and the ASD group included 30 toddlers with the mean age of 20.93 (1.05) months. The mean Q-CHAT score of the typically developing toddlers was 21.23 (SD=7.59) and the mean Q-CHAT score of toddlers with ASD was 53.30 (SD=6.88). The Cronbach's alpha coefficient for the ASD group and the normative group was 0.64 and 0.07 respectively, which indicated poor reliability. Although the translated and adapted Q-CHAT had poor reliability, it can discriminate between the typically developing toddlers and toddlers with ASD since there was a statistically significant difference in Q-CHAT scores between the two groups.

Conclusion: The Tamil version of the Q-CHAT has discriminative ability, and it can be used as a screening tool for detecting children who are at risk of autism. Further validation studies with large samples are required.