



assessments via telerehabilitation. This critical review will underscore the relevant findings comparing performance of adults with language disorders on language assessment in both telerehab and traditional face-to-

differences were found between the scores of the subtests in the face-to-face and telerehab environments as well as moderate to very good agreement between the assessors across the subtests.

This study used a randomized control trial, which demonstrates an evidence level of 1 (Archibald, 2009). It is one of the most powerful of all study designs.

Appropriate ANOVAs were performed and post-hoc Bonferroni-corrected comparisons revealed that the computer-only condition scored lower than the traditional assessment method and the computer and clinician condition. Further analysis indicated that scores from the computerized versus traditional methods were strongly correlated indicating that the telerehab assessment is comparable to traditional assessment methods.

assessment (Georgeadis, Brennan, Barker, and Baron, 2004). This may be due to the poor attention in these

A major limitation to this study was the small sample size because it is challenging to generalize to a larger population. Although randomization of participants was clearly stated, it was not adequately outlined how clinicians were blinded or randomized between conditions. Despite the limitations this research demonstrated an appropriately control condition (face-to-face assessment) to directly compare to the telerehab settings. Additionally, outcome measures were valid and reliable as well as methods were clearly described enough for replication. Overall the research provides a suggestive level of evidence and important information for clinical considerations when using telerehab methods of assessment.

### *Discussion*

Language assessments performed in telerehabilitation settings with adults with acquired brain injuries is an emerging area of interest in the literature. Taken as a whole, the research provides a suggestive level of evidence that assessments conducted in telerehab settings are comparable to traditional face-to-face methods. The studies concluded that there were no significant differences between settings (Georgeadis, Brennan, Barker, and Baron, 2004; Theodoros, Hill, Russell, Ward, and Wootton, 2008). Additionally, the research indicated that telerehab settings are as sensitive to the same factors as traditional settings (Newton, Acres, and Bruce, 2013). Research outlined in this review had common strengths in the methodologies such as strong research designs and randomization of scoring clinicians and participants. Adequate control environments were used in all research studies reviewed. Furthermore, outcome measures in three studies were standardized language assessments such as the BDAE-3 that is reliable and valid (Hill, Theodoros, Russell, Ward, and Wootton, 2009; Palsbo, 2007).

However, research was limited by small sample sizes and convenience samples. This makes it difficult to generalize to a larger population. Further, participants were at varying times post-onset and differed on type of acquired brain injuries (TBI versus stroke). It was indicated that the TBI participants performed poorer in the telerehab setting and were resistant to the method of

Furthermore, there are other factors that should be taken into consideration in future research. In the study conducted by Georgeadis, Brennan, Barker, and Baron (2004), TBI patients performed poorly in the telerehab setting. Research should be tudy