

NEURO HERO APP REVIEW

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NH neuro hero

Neuro Hero was developed by Aviva Cohen, a Researcher, lecturer and communication Consultant following her husband Steve's CerebroVascular Accident in 2006. The Talk Around It apps were developed as a therapy tool for word finding difficulties for persons following an acquired brain injury.

There are 4 versions of Talk Around It utilizing Semantic Feature Analysis (SFA) technique. The categories include Personal, Nature, Men & Home. The apps are affordable at €19.99 each. The development of an app to augment word retrieval deficits is welcomed given the revolutionized interface between technology and paper based material in the field of Speech & Language Therapy. This app review was conducted on the Home vocabulary version. It is well designed. The graphics are clear without any ambiguities. The core questions to elicit semantic features are well structured. The cueing system provided is inclusive of phonological, semantic and written cues. The layout is well organized and systematic. However visual information loading is demanding for patients with visual processing deficits. Additionally patients whom have receptive language/auditory processing and written language deficits may struggle in coping with the task demands. This app, developed in Ireland, means that auditory cues & instructions are provided in a familiar dialect which makes for an exciting development. The most significant cues to aid word retrieval i.e. 'sentence completion', 'info', 'first sound', 'written word' are easily understood and precise. The 'noise' and 'sounds like' cues are not discernible consistently.

Semantics feature analysis is one of many therapeutic tools utilized by Speech & Language Therapists where appropriate. The use of semantic feature analysis in therapy is inevitably influenced by the language profile a patient presents with upon differential diagnosis. Patients with non-fluent output may struggle with SFA approach. Specifically the loci of breakdown in word retrieval is relevant as the type of cueing to support word retrieval will be relevant here. Many studies have shown that SFA can improve confrontation naming however generalization within conversational speech can remain a challenge. Given the complexity of language processing and each individuals neural recovery process, being prescriptive about the use of this type of therapy approach is not possible.

Neuro Hero proposes to address the 'social isolation experienced by people with communication difficulties' and to 'provide home based therapies to help..... communicate with the outside world'. Whilst SFA can indeed provide a means of training carers to utilize facilitative cues when communication breaks down, it is perhaps rather aspirational to suggest that this therapeutic approach can breakdown social barriers. The use of SFA is not an easily transferrable skill without appropriate training to all communication partners. Also the efficiency of SFA as a technique depends upon each individuals cognitive processing capacity, particularly meta-cognitive ability, to enable a patient to recognize communication breakdowns and to benefit from cues provided by a communication partner to repair these breakdowns.

Ultimately the Neuro Hero Talk Around It apps have therapeutic benefit and shall be a good medium within treatment to target word finding deficits for specific cohort of patients. The informed clinical decision about the efficacy of this type of approach would need to be determined under the guidance and supervision of an SLT trained in the understanding of the complex processes of both language and cognition. To conclude, I would recommend these apps and will have then in my therapy tool box!

