Thematic Discourse Markers of Communicative Change: Promoting Communication Wellness

Joyce L. Harris¹, Swathi Kiran¹, Thomas P. Marquardt¹, & Valarie B. Fleming²
¹The University of Texas at Austin, TX
²Texas State University-San Marcos

Abstract

This normative research study tested the cognitive-communicative performance of four groups of participants (N = 72): neurologically healthy younger and older adults; adults with mild cognitive impairment (MCI); and persons with brain damage (PWB). Participants completed a discourse production task that was analyzed for linguistic and thematic information. Results revealed thematic discourse markers in the complex spoken discourse of individuals with MCI and brain damage that further understanding of cognitive-communicative decline in older adults.

Background

Altered cognitive-communicative function is a marker for a latent or emerging neurological condition that warrants medical diagnosis and treatment. Early detection may lessen complications of diseases and disorders (ASHA, 1991). Secondary prevention provides the impetus for the Communication Wellness Check-up®, a screening assessment of speech, language, and cognitive abilities. An assumption is that qualitative change in discourse may be a marker of cognitive decline.

The present research reports preliminary results on the sensitivity of thematic discourse markers for detecting group differences, as well as the relationship of thematic markers with standardized measures. The results from this early study will provide the establishment of cut-off scores, as well as uncover the sensitivity and specificity of our measures.

Materials

“Trip to New York”
Complex, elicited discourse task
Non-genre-specified discourse generation
Executive functions: Initiation, Planning, Temporal organization, abstract attitude,
Memory: Semantic, Episodic, Working memory

Three point score
0: no mention of category
1: some mention of category, very brief, one sentence
2: detail mention of category, multiple references

A total of 13 thematic elements
Proportion score calculated (2 x 13 = 26 points)

Proportion of Lexical types

NS

NS

NS

NS

Proportion N
Proportion Pro
Proportion Pre
Proportion V

Significant difference between the four groups. (F(3, 70) = 13.6, p < .0001)

Conclusion

• Deficiency of thematic concepts in the two impaired groups indicate subtle deficits in planning, problem-solving, and communication.

• Age-related differences emerged among younger, older, and impaired participants on a inclusion of some of the core thematic concepts.

• Production of core thematic concepts in the elicited discourse task may be a parsimonious index of early decline in cognitive-linguistic ability.

• Validity of the CDET as a component of the Communication Wellness Check-up® for detecting early language dissolution in adults is supported.

REFERENCES


