The goal of this study was to document and characterize the disruptions in verbal play, as an indicator of interpersonal health, social communication and ultimately social isolation. The participants with Alzheimer's disease and their familiar partners.

Methods

Participating Pairs

5 individuals with Alzheimer's disease (AD pairs)
- 5 females, M age = 77 years (SD = 5.5), M education = 14.8 years
- Newly diagnosed with "very mild AD" (based on the CDR)
- Severe verbal and nonverbal memory deficits:
  - 001AD
  - 002AD
  - 003AD
  - 010AD
  - 013AD
- CVLT Delay
- CFT Delay

CVLT = California Verbal Learning Test - delayed recall test; CFT = Corsi Fortetest

5 healthy comparisons (Comparison pairs)
- Matched for age, education, sex, handedness
- 10 familiar communication partners (spouse, sibling, friend)

Results

Total Episodes:
A total of 1,098 verbal play episodes were coded with no difference in number of episodes produced in the AD and comparison pair sessions (p = .882). All communicative participants also initiated similar numbers of episodes across groups (p = .539, .672, .930 for participant, partner, and researcher, respectively).

Introduction

Verbal play is an enjoyable component of daily interaction and serves important interpersonal functions. Attempts at verbal play and humor are recognized as such by partners who routinely not only respond to the playful episode – such as laughing at the joke – but also carry the theme over the course of the conversation or continued interactions, creating a common thread between partners and strengthening their relationship.

Research has often targeted the positive effects of humor, laughter, and social interactions on the aging process, offering a physical and psychosocial buffer from the negative changes that occur in the lives of the elderly. While research has focused primarily on introducing humor, the effects of aging on the spontaneous usage of humor and verbal play remain unclear. Even less is known about the benefits and use of humor among clinical populations.

We have previously documented disruptions in the use of verbal play in individuals with hippocampal amnesia and their partners. These findings suggested that profound memory impairments, in the context of normal linguistic functioning, can disrupt the deployment of verbal play in social interaction and may contribute to patients' reports of social isolation.

Participants with hippocampal amnesia and Alzheimer's disease have remarkably similar memory profiles, we know that the middle to late stage of Alzheimer's disease is also associated with debilitating cognitive social skills, often accompanied by little to no social communication and ultimately social isolation. Do disruptions in verbal play, as an indicator of interpersonal health, emerge in the early stages of Alzheimer's disease? If so, this could be an appropriate site for intervention.

The goal of this study was to document and characterize the quantity, quality, and interactional functions of verbal play in the communicative interactions of elderly individuals with and without Alzheimer's disease and their familiar partners.

Predictions: In the discourse of participants with Alzheimer's disease, we expect:
1) Fewer total verbal play episodes, and;
2) Fewer extended episodes, versus comparison pairs.

Data Analysis

Analysis was performed on data obtained as the AD and comparison pairs completed a collaborative referencing task during which the Alzheimer's participants demonstrated robust collaborative learning.

Task completed across 12 trials, 6 trials per session on a single day
Data included:
- Session instructions (participant, partner, researcher)
- Total interactions (participant, partner)
- Inter-trial talk (participant, partner, researcher)
Over 12 hours videotaped data (Alzheimer's sessions = 6.3 hours versus comparison sessions = 6.4 hours)

Verbal Play Coding

Using a consensus coding process, we looked for all instances of:
- Overt teasing of others or self-deprecating humor, use of marked or non-phonetic registers, singing or song-like intonations, and use of other

Coded for:
- Resources deployed – verbal, prosodic, gestural
- Functions – referencing, teasing, narrative, other
- Interpersonal forms – simple, simple*, extended

Figures

- Figure 2: Distribution of resources by group and study
- Figure 3: Distribution of functions by group and study
- Figure 4: Distribution of interactive forms by group and study

Discussion

All participants initiated and contributed to verbal play episodes. In fact, participants with very mild Alzheimer's disease engaged in verbal play episodes of both equivalent quantity and quality to those produced by comparison pairs despite previous work demonstrating the impact of profound declarative memory deficits in patients with hippocampal amnesia on verbal play and the lack of social communication seen with more advanced stage AD.

Additionally, as compared to the amnesia pairs and comparisons, the Alzheimer's study participants (both AD and comparison pairs) demonstrated greater complexity (less reliance on single resources) and appeared to be more socially interactive (more teasing and extended episodes) in their verbal play episodes.

Why are there differences between the two studies?

The participants in the current study were significantly older as compared to the amnesia participants (M = 77 years versus M = 49, respectively). It is known about the effects of aging on the spontaneous use of verbal play. The older participants utilized verbal play most frequently for teasing, generally of each other and for self-deprecation, whereas the younger participants exhibited more playful language when referencing the cards in the task. A closer look at the use of verbal play across the lifespan is clearly warranted.

What are the implications for treatment?

While participants with very mild Alzheimer's disease were able to successfully participate in verbal play, it is known that social communication will decline with disease progression. As verbal play and social communication require the coordination and collaboration of both partners, communicative creativity should also be targeted in their communication partners for increased structure and support.

References


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