



The Effects of Poetry in Elderly Populations with Memory Impairment

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BACKGROUND

- Neuropsychological processing of poetry and music are similar. “Phenome-level language units” found in both music and simple rhyming poetry contribute to learning and recalling information^{1,2}.
- Small, yet growing body of research exists on the therapeutic use of poetry interventions in individuals with memory impairment³⁻⁵.
- Poetry has shown promising effects in this population, akin to the success of musical interventions⁶⁻⁹.
- We intend to evaluate the effect of poetry in elderly population with memory loss and/or dementia.

METHODS

- Two observers independently evaluated 12 poetry sessions at the Converse Home’s Gardenview memory impairment facility. Observations of the poetry group were tallied using Likert scale forms with predetermined categories.
- T-tests were conducted to compare reading sessions to writing sessions in terms of tallied measures in each category.
- ANOVA and post-hoc comparisons were conducted to compare tallied measures of mood and behaviors within the reading and writing sessions; as well as to compare degree of participation within the writing session.

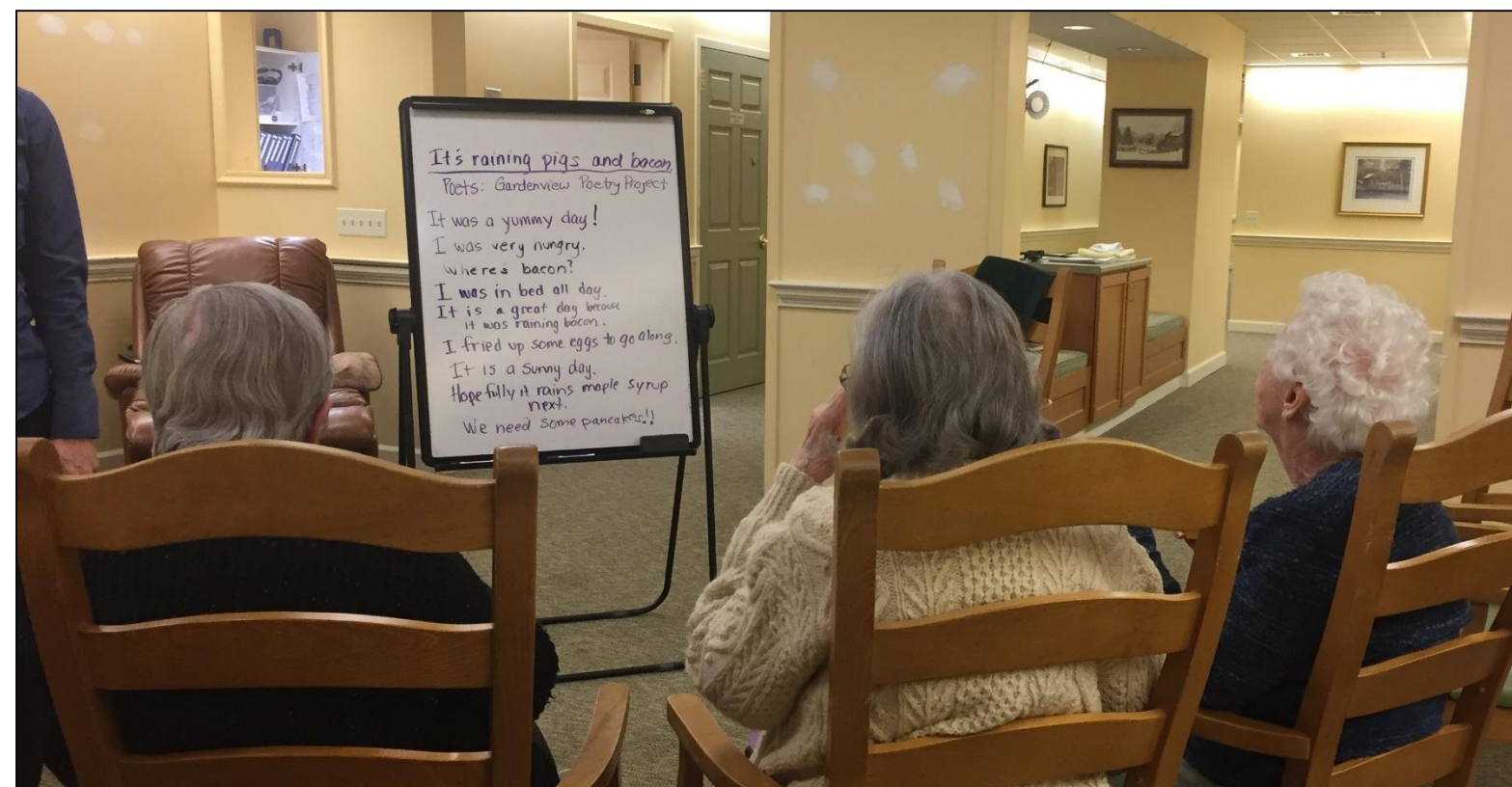


Image 1: The residents of Gardenview participate in weekly hour-long poetry sessions.

RESULTS

On average, 9 (range, 7-11) residents attended each session.

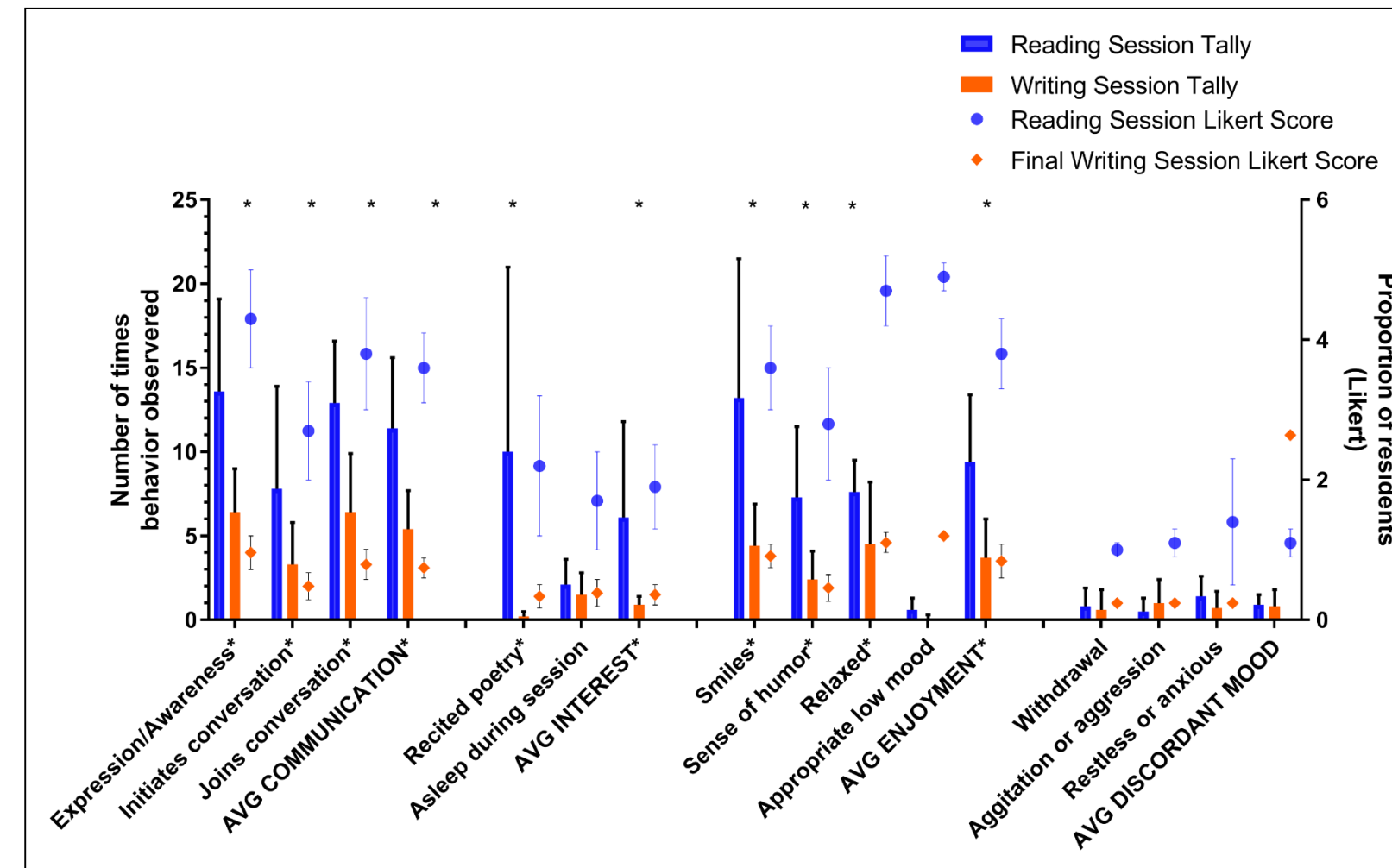


Figure 1: Average number of observations for given behaviors [column data] during reading sessions (n=12) and final writing sessions (n=10). Average proportion of residents [scatter data] displaying given behaviors rated from 0 (none of the residents) to 5 (most to all of the residents).

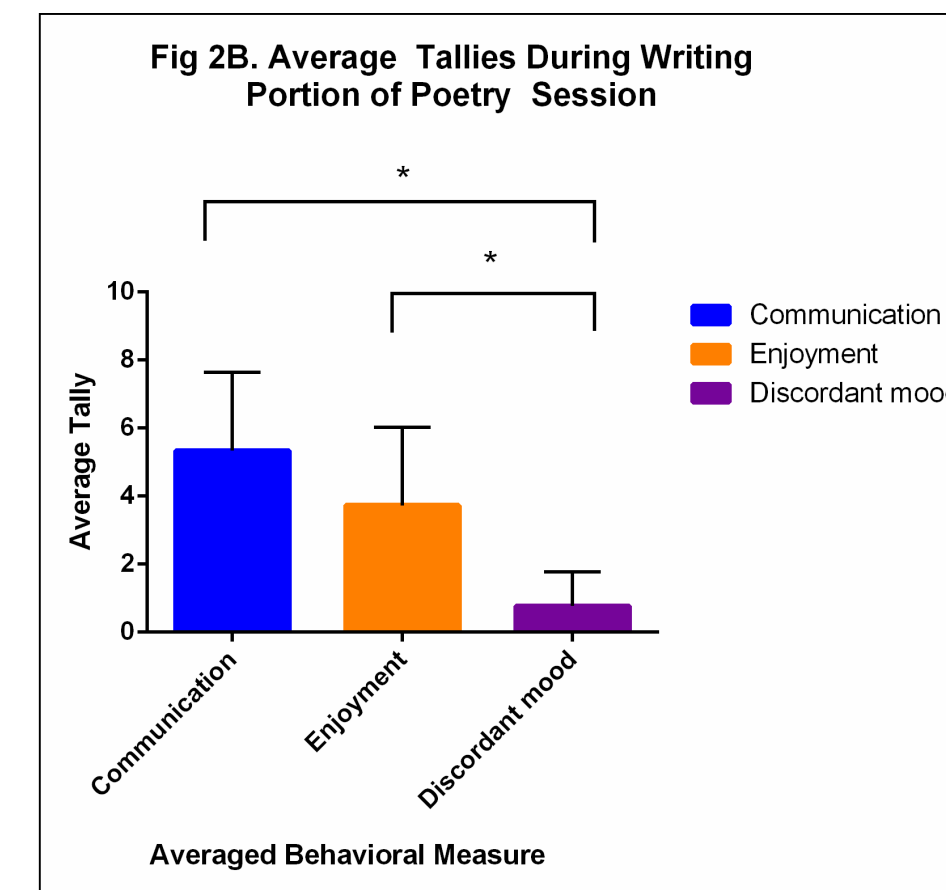
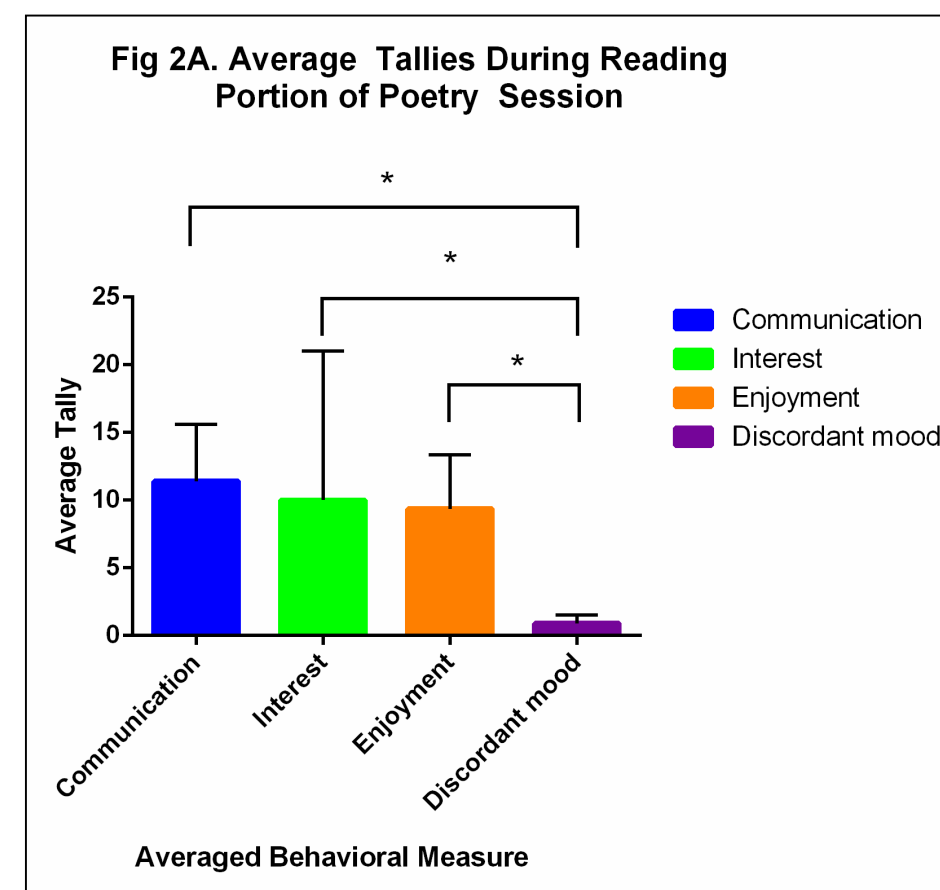
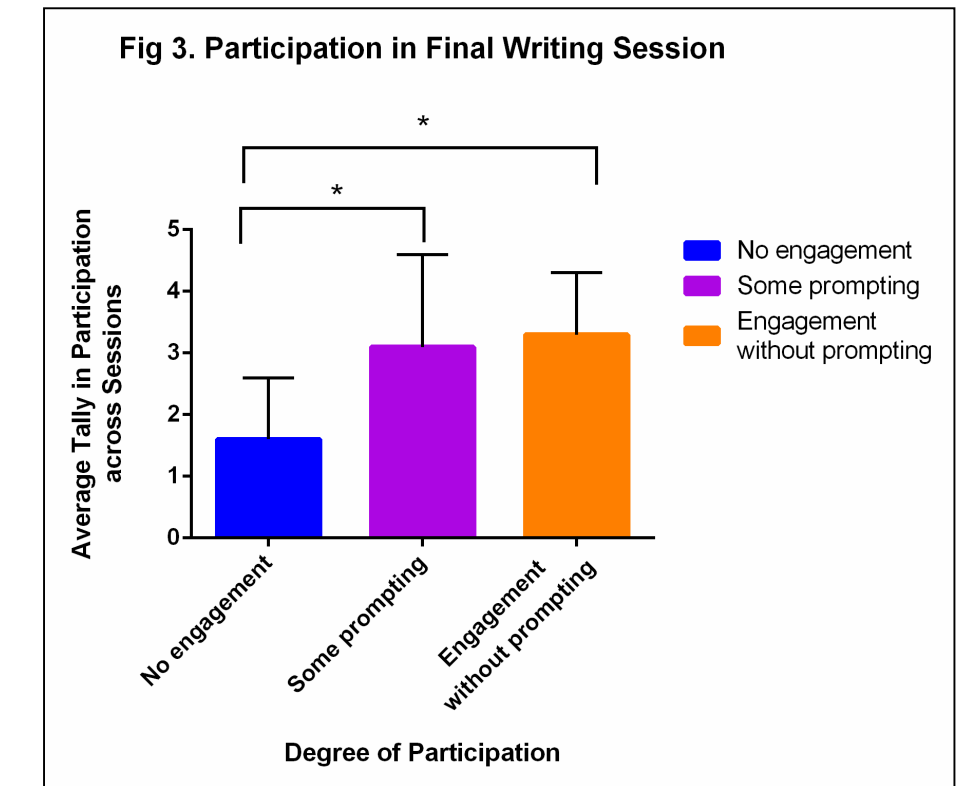


Figure 2. For both reading and writing sessions, positive behavioral measures were statistically greater than discordant mood (p<0.05), but not statistically different from each other. Positive measures included communication, interest, and enjoyment for reading sessions and communication and enjoyment for writing sessions.

Figure 3: Residents were more likely to engage without prompting (x=3.3) or with some prompting (x=3.1) than to not participate (x=1.6) in the final writing session (p<0.05).



RESULTS

- “Positive” quality of life markers (communication, interest, and enjoyment) were scored higher than “negative” markers (discordant mood) during the poetry reading and writing sessions.
- “Positive” responses were significantly higher during the reading vs. the final writing session. No corresponding increase in “negative” responses during the writing session indicated that the lower “positive” scores were not due solely to time of the activity.
- Anecdotally, increased spontaneous poetry recitation occurred when sessions featured “older” poetry. Familiarity with these poems may be due to generational significance and memorization of poems during youth. Preference for older poetry has been reported previously by groups studying music therapy for dementia patients¹⁰.
- Due to limitations, we are unable to draw individual conclusions regarding the efficacy of poetry to alleviate the burdens of dementia, however, we demonstrate that poetry sessions have a positive impact on global quality of life outcomes and introduction of poetry sessions in this population has a beneficial effect.

REFERENCES

1. Goswami U. In the beginning was the rhyme? A reflection on hulme, hatcher, nation, brown, adams, and stuart (2002). *Journal of experimental child psychology* 2002;82:47-57; discussion 58-64.
2. Lerdahl F. The sounds of poetry viewed as music. *Annals of the New York Academy of Sciences* 2001;930:337-354.
3. Petrescu I, MacFarlane K, Ranzijn R. Psychological effects of poetry workshops with people with early stage dementia: an exploratory study. *Dementia (London, England)*. 2014;13:207-215.
4. Swinnen AM. Healing words: A study of poetry interventions in dementia care. *Dementia (London, England)*. 2016;15:1377-1404.
5. Wexler M. A poetry program for the very elderly-Narrative perspective on one therapeutic model. *Journal of poetry therapy*. 2014;27:35-46.
6. Agustus JL, Mahoney CJ, Downey LE, et al. Functional MRI of music emotion processing in frontotemporal dementia. *Annals of the New York Academy of Sciences*. 2015;1337:232-240.
7. Bruer RA, Spitznagel E, Cloninger CR. The temporal limits of cognitive change from music therapy in elderly persons with dementia or dementia-like cognitive impairment: a randomized controlled trial. *Journal of music therapy*. 2007;44:308-328.
8. Cheong CY, Tan JA, Foong YL, et al. Creative Music Therapy in an Acute Care Setting for Older Patients with Delirium and Dementia. *Dementia and geriatric cognitive disorders extra*. 2016;6:268-275.
9. Raglio A, Bellandi D, Baiardi P, et al. Effect of Active Music Therapy and Individualized Listening to Music on Dementia: A Multicenter Randomized Controlled Trial. *Journal of the American Geriatrics Society*. 2015;63:1534-1539.
10. Gibbons AC. Popular music preferences of elderly people. *Journal of music therapy* 1977;14:180-189.