

2018

A Sensory-Based Program to Enhance Occupational Performance for Dementia

Naomi Grace Wong
Dominican University of California

Jacob Joseph Gantan
Dominican University of California

Ivy Annahi Torres-Flores
Dominican University of California

Heather Anne August
Dominican University of California

Survey: Let us know how this paper benefits you.

Recommended Citation

Wong, Naomi Grace; Gantan, Jacob Joseph; Torres-Flores, Ivy Annahi; and August, Heather Anne, "A Sensory-Based Program to Enhance Occupational Performance for Dementia" (2018). *Student Research Posters*. 76.
<https://scholar.dominican.edu/ug-student-posters/76>

This Presentation is brought to you for free and open access by the Student Scholarship at Dominican Scholar. It has been accepted for inclusion in Student Research Posters by an authorized administrator of Dominican Scholar. For more information, please contact michael.pujals@dominican.edu.



INTRODUCTION

- Dementia is a crippling disease that causes behavioral and psychological symptoms that impair a person's ability to engage in activities that bring meaning into their lives (Pendleton & Schultz-Krohn, 2013).
- The dementia population is expected to triple to over 16 million by 2050 (Prince, Guerchet, Prina, 2013).
- Sensory-Based Programs, including drumming groups, provide sensory stimulation to individuals with dementia to facilitate occupational performance (Chung, 2006; Champagne, 2003).

STATEMENT OF PURPOSE

Purpose:

The purpose of this study is to examine whether participation in a sensory-based program affects behavior and engagement in ADLs for individuals with dementia.

Research Question:

Does participation in a drumming group have a positive impact on functional performance among individuals with dementia when engaging in self-feeding?

RESEARCH METHODOLOGY

- Pre-test Post-test Quantitative Research Design
- Participants (n=8) were observed over two days: Baseline and Drumming day
- All participants fall within Allen Cognitive Levels 3-4
- Outcome measures, completed by the researchers, include mood (VAS), agitation (ABS), behavior (FBP), and functional activity of self feeding (SFQ).

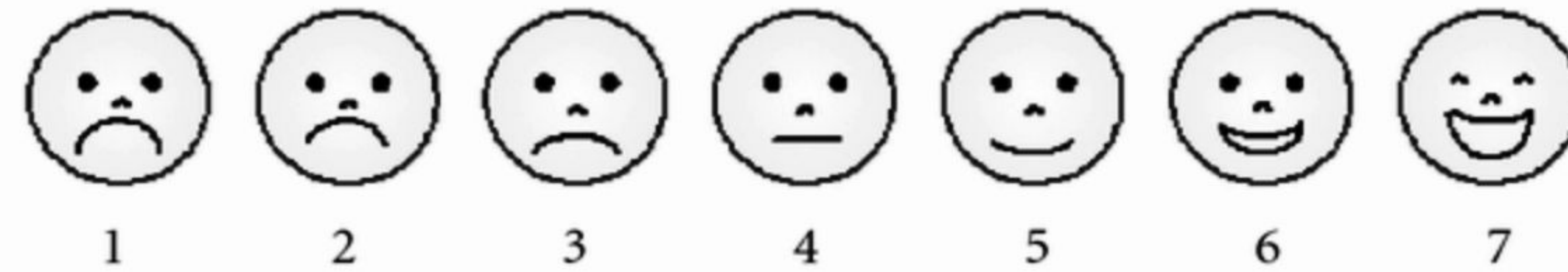
Drumming Group Observation (Drumming Day)

- Participants engaged in a drumming group for 30 minutes led by a drumming instructor.
 - Rhythmic beating while introducing names
 - Singing songs while beating drum

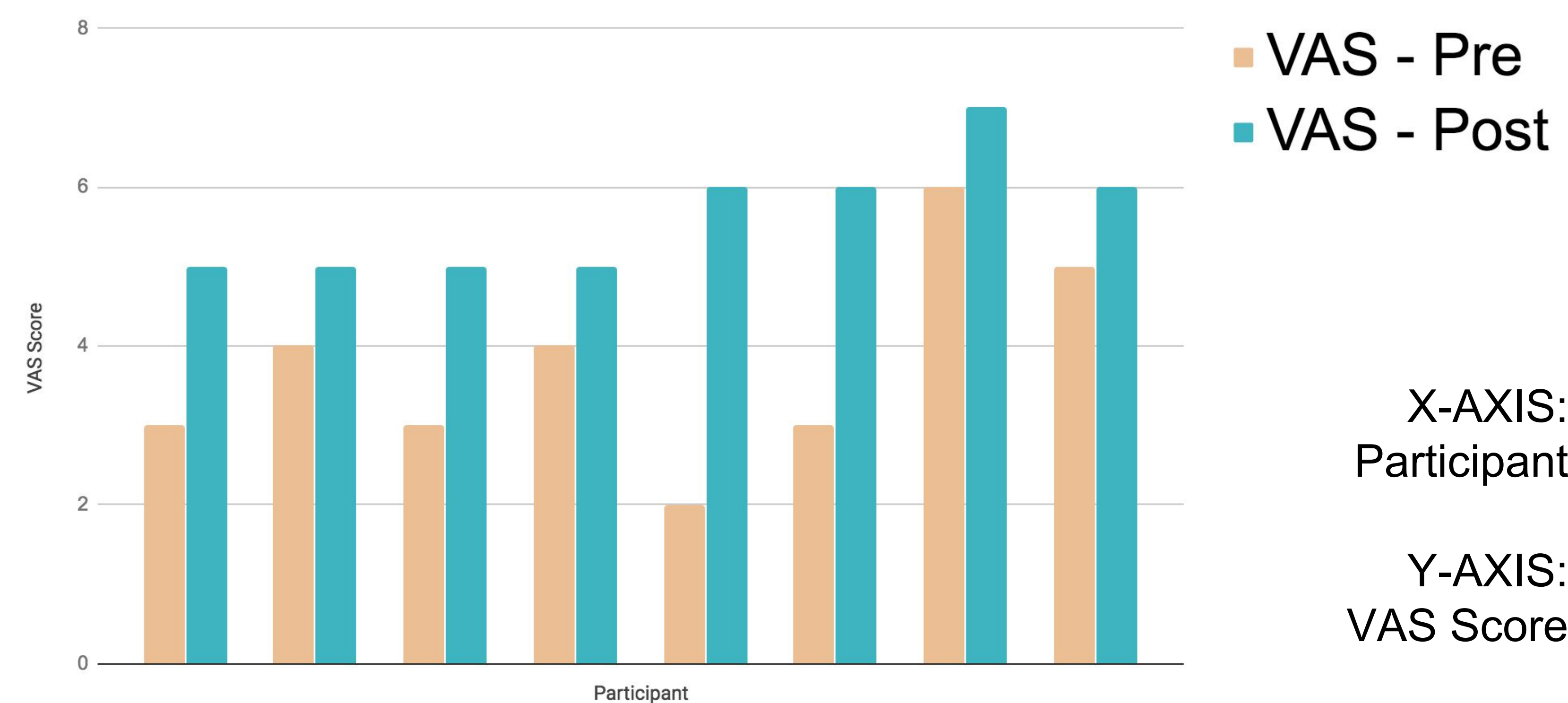
Lunch Observation (Baseline and Drumming Day)

- Participants were observed while self-feeding during lunch for 40 minutes.

"Please, indicate the face that best describes your current mood:"



Visual Analog Scale - Pre and Post Drumming Group



RESULTS

- A paired t-test was conducted to compare mood, agitation, functional behavior, and self-feeding skills before and after participation in a drumming group. There was a positive improvement in mood before (M=3.75, SD=1.282) and after (M=5.63, SD=0.744) the participation in the drumming group.
- A positive trend of improvement was noted in the ABS, FBP, and SFQ after participation in the drumming group, but they did not reach significance.

	Baseline Mean (SD)	Drumming Mean (SD)	t-value	p-value
VAS*	3.75 (1.28)	5.63 (0.74)	-4.71	0.002
ABS**	1.09 (0.15)	1.01 (0.03)	NS	0.164
FBP*	2.92 (1.15)	3.03 (1.24)	NS	0.43
SFQ*	2.26 (0.82)	2.73 (1.29)	NS	0.41

*Drumming mean score increase = improvement
**Drumming mean score decrease = improvement

DISCUSSION AND CONCLUSION

- Participants became more engaged and were responsive to direct cues throughout the course of the drumming group.
- No change was seen in function or agitation in a self-feeding session following the drumming group.
- The lack of effect on self-feeding function and agitation and behavior may have been due to the delayed time between the end of the drumming group and lunch delivery.



Copyright© Ensign Services 2016

IMPLICATIONS FOR PRACTICE

- This pilot study suggests that participating in a drumming group improves mood and engagement during the group.
- A suggestion for future studies would be to measure arousal or engagement as an outcome **during participation in a drumming group**.
- Providing sensory-based interventions may be a viable non pharmacological intervention for the dementia population. Additional research is needed.

ACKNOWLEDGEMENTS

We would like to thank Ensign Cloverdale Healthcare Center, Gina Tucker-Roghi, OTD, OTR/L, our participants, and our faculty advisor, Susan Morris, Ph.D., OTR/L for participating and supporting us in this study. We would also like to thank our families for supporting us through our academic journey.

REFERENCES

- Champagne, T. (2003). *Sensory modulation & the environments: essential elements of occupation*(3rd ed.). Southampton, MA: Champagne Conferences.
- Chung, J. C. C. (2006). Measuring sensory processing patterns of older chinese people: Psychometric validation of the adult sensory profile. *Aging & Mental Health, 10*(6), 648-655.
- Pendleton, H. M., & Schultz-Krohn, W. (Eds.). (2013). *Occupational Therapy: Practice Skills For Physical Dysfunction* (7th ed.). St. Louis: Mosby.
- Prince, M., Guerchet, M., & Prina, M. (2013). *Policy Brief for Heads of Government: The Global Impact of Dementia 2013 – 2050* [PDF]. London: Alzheimer's Disease International (ADI)