A Sensory-Based Program to Enhance Occupational Performance for Dementia

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A Sensory-Based Program to Enhance Occupational Performance for Dementia

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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 who are 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.

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 and after participation in the drumming group (M=3.75, SD=1.282) and after (M=5.63, SD=0.744) the participation in the drumming group. There was 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.

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

*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.

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

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REFERENCES

