Sustainability of the *Ready Approach* in a Long-Term Care Setting

Rachel Noonan, BS, OTS
Faculty Mentor: Ranelle Nissen, PhD, OTR/L

UNIVERSITY OF SOUTH DAKOTA
SCHOOL OF HEALTH SCIENCES

BACKGROUND & PURPOSE

Purpose: To implement the *Ready Approach* in a long-term care facility and promote sustainability in order to decrease behaviors among residents diagnosed with dementia.

- 46.8 million people worldwide were living with dementia in 2015 and this number is expected to increase to 75 million by 2030 (Alzheimer's Disease International, 2016). More than 90% of those diagnosed with dementia develop at least one behavioral or psychological symptom (Cerejeira, Lagarto, & Mukaetova-Ladinska, 2012). Sensory changes are also common among this population (Bakker, 2003).
- The *Ready Approach* is a sensory-based approach that incorporates vestibular, proprioceptive, and deep pressure touch into a person's day to help regulate the sensory system and decrease challenging behaviors (Barker, 2013).
- While sensory-based interventions have shown positive results, program implementation in a long-term care setting can be challenging due to a variety of barriers including high staff turnover, lack of staff buy-in, high workload, and lack of leadership support (Barnes & Salaemi, 2016; Kazana & Pencak-Murphy, 2018).
- Strategies for program implementation in this setting include strong communication, continual staff training, monitoring for barriers, and asking for staff feedback (Barnes & Salemi, 2016; Beck et al., 2005, Compass, Hopkins, & Townsley, 2008).

IMPLICATIONS FOR OCCUPATIONAL THERAPY

Implications for Practice:
- Positive initial results in decreasing challenging behaviors among residents diagnosed with dementia
- Reduction in behaviors can help residents to participate in their daily occupations and decrease stress levels due to sensory processing dysfunction
- Importance of completing the *Ready Approach* throughout a resident's daily routine
- Program sustainability of the *Ready Approach* is much more likely with staff buy-in, leadership support, consistent training of new staff, strong communication among staff members, designating responsibilities, and consistent monitoring of program completion.

Revisions to Theory:
- **The Ecology of Human Performance (EHP)** currently incorporates temporal and environmental categories of context (Dunn et al., 1994). Environmental context according to EHP includes physical, social, and cultural aspects (Dunn et al., 1994).
- Addition of a sensory context lens to emphasize the importance of external sensory input on behavioral responses and task performance range
- **Dunn's Model of Sensory Processing** focuses on the interaction between neurological thresholds for sensory input and the resulting behavioral responses (Dunn et al., 1997). While this model incorporates tactile sensory input, it does not distinguish between deep pressure touch and light tactile stimuli.
- The *Ready Approach* specifically emphasizes the importance of deep pressure touch and the potentially adverse effects of light touch, which can elicit a fight or flight response (Barker, 2013).
- Dunn's Model of Sensory Processing could benefit from distinguishing between deep and light pressure touch, which can create very different behavioral responses.

THEORETICAL FOUNDATION

Ecology of Human Performance Model (EHP)
- Emphasizes expanding an individual's performance range by changing the environmental context to promote engagement in tasks (Dunn, Brown, & McGuigan, 1994).
- Supportive context to promote task performance. When a person's sensory system is not effectively processing external stimuli, a stress response can result and lead to agitation, aggression, wandering, or other behaviors resulting in decreased ability to carry out performance tasks.
- The *Ready Approach* can provide a way to change the context by implementing a sensory flow of the day to help regulate sensory information and expand an individual's performance range.

- **Dunn's Model of Sensory Processing**
- An individual's behaviors are an indicator of his or her sensory thresholds (Dunn, 1997).
- The *Ready Approach* can to provide the appropriate amount of sensory input needed to regulate behaviors and sensory thresholds.
- For example, one resident who participated in this program would wander for hours creating safety issues and increased fall risk. The *Ready Approach* helped to provide this resident with increased proprioceptive input in the form of joint compressions and deep pressure hand hugs. This resident demonstrated an almost immediate calming response to these techniques, which helped to regulate her sensory threshold and decrease her need to wander.

METHODS

- Obtained certification in the *Ready Approach* and certification as a Trainer of Sensory Processing Techniques
- Conducted a needs assessment following the Logic Model in order to assess the inputs/resources, activities, participants, and outcomes/impacts
- Facilitated focus groups, interviews, and collaborative meetings to promote staff buy-in and leadership support
- Trained staff in the *Ready Approach* before and after shift change
- Screened residents on the household using the *Ready Approach* Screen
- Selected five residents as identified as appropriate for the *Ready Approach*
- Created a sensory flow of the day for each resident with examples of when to implement throughout a resident's day
- Baseline behaviors tracked for 2 weeks, residents participated in program for 6 weeks
- To promote sustainability of the program, training resources were provided to the facility including a training manual, program protocol manual, training video, and Ready Approach screens.

RESULTS/CONCLUSIONS

- A significant difference ($Z = -2.02$, $p < 0.05$) between the average number of behaviors between baseline to weeks 5 and 6.
- A significant difference of decreased behaviors among participants receiving the *Ready Approach* $\chi^2(3) = 12.84$, $p = 0.005$. Post hoc results showed a significant difference between baseline behaviors and weeks 1-2 ($p = 0.04$), baseline behaviors and weeks 3-4 ($p = 0.04$), and between weeks 1-2 and 5-6 ($p = 0.04$).
- *Figure 1* shows the average number of behaviors over the 6-week program. The average number of behaviors decreased for each participant.

Conclusion: The results of this program demonstrate initial clinical effectiveness of this approach. While providing this approach to residents, staff could visually see the resident relax. This further promoted staff buy-in as staff could see immediate results of the *Ready Approach*. While the results of this program are promising, the long-term care setting presents a few barriers to program implementation. Program implementation and sustainability is more likely with strong leadership support, staff buy-in, continual staff training, and assigned responsibilities.

Figure 1: Number of Behaviors During the Ready Approach
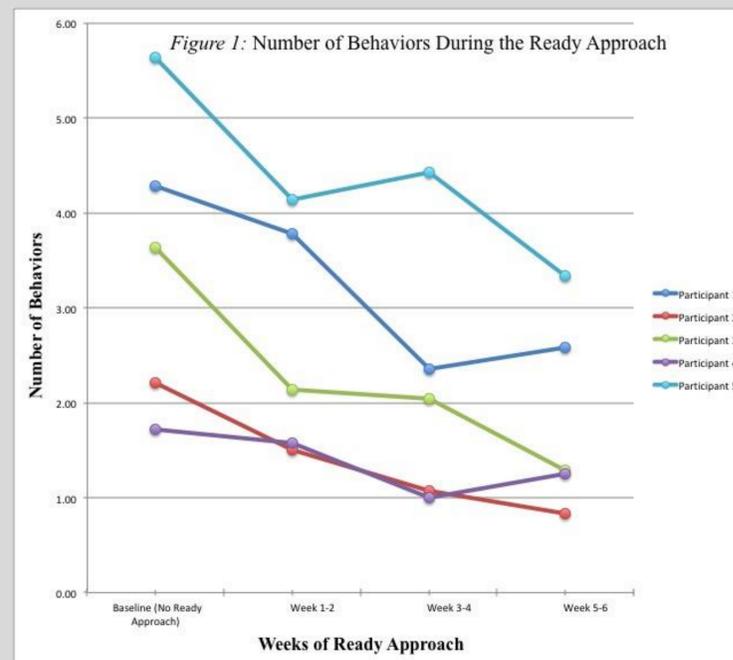
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