



Abstract

- Fieldwork education is an essential component of an occupational therapy student's academic career that bridges academic education and everyday practice in the field of occupational therapy. The overall goal and purpose of this doctoral capstone was to develop an occupational therapy program at a homeless shelter while providing students with a Level I fieldwork experience in a community based setting.



Landscape of Homelessness

- A homeless person is "an individual who lacks a fixed, regular, and adequate nighttime residence" (Helfrich, 2011).
- The homeless population is not homogenous, but differs in demographics, subgroups and their patterns of homelessness.
- At least 800,000 individuals (200,000 children) are homeless in the US.
- There are four times as many emergency animal shelters in the U.S. than emergency shelters for people.



Pennsylvania Homeless Statistics

- Individuals in low income households doubled in 2013, and homeless living temporarily with others increased by 9.4% nationally and by 17.1% in Pennsylvania.
- In 2013, the nation saw a 1.4% increase in homeless families, with a 2.9% increase in Pennsylvania.
- Although nationally the number of chronically homeless individuals and veterans decreased significantly, these numbers increased in Pennsylvania - the chronically homeless by 3.7% and homeless veterans by 4.6%.
- The majority of homeless stay in emergency shelters or transitional housing, but 38% are unsheltered. The size of the unsheltered population remained basically unchanged between 2011 and 2012.



Fieldwork Literature Review

- The purpose of fieldwork education is to propel each generation from the role of student to practitioner.
- Through the fieldwork experience, future practitioners are given the opportunity to achieve competence in applying an evidence based occupational therapy process to meet the identified needs of the client.
- Students apply principles learned from the academic program to address actual needs of an individual within in the context of practice environments.
- Fieldwork promotes advocacy and leadership skills as well as the development of a professional identity.
- Fieldwork education is an essential bridge between academic education and the practice of occupational therapy in various settings.



Homelessness Literature Review

- An alternative approach for occupational therapists is to focus on enabling participation by identifying and minimizing occupational performance barriers and environmental constraints, and by expanding opportunities for mastery experiences in a person's natural environment. In this approach, the emphasis is on maximizing goodness-of-fit among individuals, their occupations, and the socio-physical environments in which occupations occur.
- The overarching goal of occupational therapy interventions for persons living in homeless shelters is to maximize person-environment-occupation fit to enable participation in the immediate shelter environment and to reconfigure person-environment-occupation relations to enable greater participation in the community.
- Providing supportive services like occupational therapy to individual's with psychosocial needs can help them achieve and maintain residential stability, improve overall mental health, and decrease the cost of homelessness in communities.



Learning Objects of the Capstone

- Objective 1: Learn the process of developing a level I fieldwork experience in a non-traditional practice setting.
- Objective 2: The development of fieldwork assignments and postings related to the experience at a homeless shelter.
- Objective 3: Learn the process of designing and implementing groups for individuals residing at a homeless shelter based on their identified needs.



Suicide and the Impact on Individual and Family Occupational Well-Being

Dawn M. Evans, OTD, OTR/L

Introduction

Suicide is undeniably preventable yet continues to silently climb in ranking worldwide. It is frequently met with silence in our communities, a barrier for those seeking help and an endless emptiness for those in search of support. Occupational therapy plays a vital role in promoting individual, community, and global health by engaging people in everyday life activities that have both meaning and purpose. With suicide on the rise, it is imperative as a profession we safe guard the well-being of those at risk, as well as the families left behind.

Research Question

What is the lived experience of suicide survivors and the impact of suicide on their everyday occupations?

Literature Review

Suicide is the 10th leading cause of death in the U.S. On average one person every 12.3 minutes, one adolescent every 1 hour and 44 minutes, and one older adult every 1 hour and 8 minutes dies by suicide. After cancer and heart disease, suicide accounts for more years of life lost than any other cause of death. It does not discriminate by age, gender, culture or sexual orientation. With each death by suicide, it is estimated that 6.3 million people are affected by a loss annually.

Social Participation

Rest/Sleep

Work

Client Factors

Performance Patterns

Performance Skills

Leisure/Play

ADL's & IADL's

Education

Methodology

The qualitative approach of an autoethnography was utilized to examine the research question. An autoethnography is used in understanding the general population by studying the individual, placing the researcher's personal experiences within their social and cultural context. This was obtained by a rich narrative recounting the researcher's perspective, as well as the inclusion of family perceptions through journaling, discussion and analysis of occupational configurations to describe familial context and occupational well-being.

Findings

Common themes were found that were identified as having an impact on everyday occupation and overall well-being. These included; disruption in sleeping patterns, lack of social participation and engagement in familiar activity that would be in larger groups, altered engagement in work and work related activities, decrease in basic ADL self care and IADL tasks, decrease of leisure skills, decrease in body function, decrease in performance skills and changes in spirituality.

Discussion

The traumatic experience of losing a loved one to suicide can indelibly alter a person and change the perceptions of what they value as meaningful in life. Implications for OT practice include; creating and conducting health promotion, wellness and maintenance programming for suicide survivors, suicide awareness and prevention programming across the developmental continuum, compensation, adaptation and support groups related to bereavement that has meaning to survivors of suicide.



Play Palette: An occupation-based approach to community practice promoting occupational performance for women and children in homeless shelters.

Carrienne G. Matthews, OTD, OTR/L; Lalit J Shah Ed. D. OTR/L



Background Info & Literature Review

- Homelessness is a national issue that significantly impacts a woman’s and child’s ability to engage in typical occupations (Davis, Polatajko, & Ruud, 2002)
- The impact of living in a homeless shelter can impair co-occupation, which is essential for a child’s development of skills needed for their occupational development (Price & Stephenson, 2009)
- The lack of parenting skills among women in shelters can create poor growth and development for the child (Waldman-Levi & Weintraub, 2015)
- Intervention programs that improve a child’s play skills and the mother-child relationship promotes development of cognitive, sensory, language, motor, emotional, and social behaviors (Waldman-Levi & Weintraub, 2015)
- Occupational therapists are experts and skilled at providing family-centered services to improve mental and emotional health (Gronski et al., 2013)

Strengths and Barriers

- Need exists for programming in homeless shelters to improve the quality of life of residents
- The program utilizes play, which positively impacts growth and development and is something that a child can relate to
- The expertise of an occupational therapist is integrated into the program to empower women with parenting skills and improve the mother-child relationship
- Current evidence and similar programs being implemented is lacking
- The limited resources that facilities have available may create difficulty for acquiring necessary materials
- Possibly poor participation from residents and inconsistent communication with the shelter

Objectives

- Educate staff in the homeless shelter on the impact of homelessness on an individual’s occupational performance and the benefits of occupational therapy being integrated in community-based settings.
- Create and implement an occupation-based play program in a homeless shelter to improve a child’s motor, sensory, social interaction, cognitive, language, and self-esteem skills.
- Empower women in the shelter with functional parenting skills.

Program Design and Methods

Upon assessing the needs of the homeless shelter, Play Palette was developed as a two-tier program. Tier 1, “Foundational Hues”, consisted of a “Parent Session” component and a “Child Only” Play Session component. Both components included a total of 3 sessions, with each session being 60 minutes in length. Parent sessions were modified to not include individual sessions. Rather, home programs were provided to each parent after the “child only” play sessions. The “child only” play sessions addressed gross motor, manipulation, construction, and imagination play. One session was completed per week, with 5 minutes for the opening, 50 minutes for joint play, and 5 minutes for closing. Methods used by the therapist to facilitate intervention included modeling, environmental organization/adaptation, mediation, consultation, enabling, reflection, and reframing. Participants were selected by the childcare director and were restricted to children residing in the shelter between the ages of 4-7 years old. A maximum of 5 participants per session were allowed. Session 1A included 1 Boy, age 6 and 2 Girls, ages 5 and 7; Sessions 2A and 3A included 1 Boy, age 6 and 1 Girl, age 7. Sessions 1B, 2B, and 3B included 2 Boys, both age 6 and 2 Girls, one age 6 and the other age 7. Due to limitations provided by the homeless shelter, Tier 2 protocols, “Hue Enhancers”, were not implemented.

Results

	Session 1A	Session 2A	Session 3A	Session 1B	Session 2B	Session 3B
Attendance	Child 1 Child 2 Child 3	Child 2 Child 3	Child 2 Child 3	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6
Completes Home Assignment	N/A		Child 2 Child 3	N/A	Child 3 Child 4	Child 3 Child 4
Interacts Positively With Peers	Child 2	Child 2 Child 3	Child 2 Child 3	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6	Child 4 Child 5 Child 6
Participates in All Tasks	Child 1 Child 2	Child 2 Child 3	Child 2 Child 3	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6	Child 4 Child 5 Child 6
Difficulty With Following Instructions	Child 3	Child 3		Child 3	Child 3 Child 5 Child 6	Child 3
Remains Entire Session	Child 1 Child 2 Child 3	Child 2 Child 3	Child 2 Child 3	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5 Child 6
Ranks Session Fun	Child 1				Child 6	Child 6
Ranks Session Very Fun	Child 2 Child 3	Child 2 Child 3	Child 2 Child 3	Child 3 Child 4 Child 5 Child 6	Child 3 Child 4 Child 5	Child 3 Child 4 Child 5
Ranks Session Not Fun						

Results

Developmental Deficits Demonstrated in Sessions					
	Motor	Sensory	Emotional	Cognitive	Social Skills
Child 1	X		X		X
Child 2					X
Child 3	X	X	X		X
Child 4					
Child 5					X
Child 6					X

Following the presentation to staff at the homeless shelter on the impact that homelessness has on an individual’s occupational performance, “Play Palette” was created and implemented within the facility. The program utilized the occupation of play to promote participant’s motor, sensory, social interaction, cognitive, language, and self-esteem skills. Two rounds of the “Foundational Hues” component was implemented, which included a total of 6 sessions. Overall, 7 children had the opportunity to participate in the program. Within the sessions, deficits that were apparent with participants included the areas of motor, emotional, sensory, and social skills. Greater deficits were noted with 3 of the 7 participants. For each round of sessions, participants were rated on the following: attendance; completion of home assignment; interacting positively with peers; participating in all tasks; difficulty with following instructions; and remaining the entire session. At the end of each session, participants ranked the overall session as either being “fun”, “very fun”, or “not fun”. Prior to the children leaving, the therapist had the opportunity to briefly speak with mothers who came to retrieve their children. These mothers were provided with written instructions for engaging in play with their child. However, the therapist was restricted by the shelter, and therefore unable to implement the component of the program to empower the women with functional parenting skills. Overall, the program considered successful by both the excitement from the child participants as well as the primary staff member collaborating with the therapist. The staff member completed both an interim and final staff assessment regarding the program. There were no suggestions provided for areas within the program needing improvement. The staff member reported that the therapist was passionate, energetic, and interacted well with the children.

Limitations

- Homeless shelter provided limited time for program to be implemented.
- The program was designed to include both Tier 1 and Tier 2. However, only Tier 1 was implemented.
- Lack of clarity in outcome measures for “Child-Only” play session created difficulty in measuring progress in all areas of the sessions provided.

Conclusions

- The child participants demonstrated excitement to participate in sessions each time that the therapist was present.
- Although the program was shortened, an occupation-based play program that promoted age-appropriate development of motor, sensory, social interaction, cognitive, language, and self-esteem was successfully implemented within the homeless shelter.
- The staff member overseeing the therapist’s provision of this program reported that Play Palette was both successful and beneficial for residents of the shelter.
- Despite limitations, the therapist continues to have a relationship with the shelter and is working on continued programming to improve the overall occupational performance of women and child residents.
- The program was unable to truly have an impact on the women’s parenting skills within the shelter due to the shelter’s preference to only implement the “child only” play sessions.

Implications for OT Practice

- OT practitioners are experts with identifying and addressing the occupations of children and adults, including providing family-centered intervention programs.
- It is essential for OT practitioners to step outside of the box and advocate for the profession by promoting cultural competence through integrating services in community-based settings such as homeless shelters.
- OT practitioners must contribute to future research in the area of providing occupation-based programming to women and children who are subject to residing in homeless shelters.



Residents Co-Existing with Cognitively Impaired Residents in Assisted Living

William Sopko, OTR/L; Stephanie Evans, OTR/L; Samantha Warden, OTR/L; Jacqueline Corey, OTR

Kathleen Hughes-Butcher, OTR/L
Misericordia University, Dallas, Pennsylvania, USA



OBJECTIVE

This study used a phenomenological approach with correlational methods to understand eleven cognitively intact residents’ transition to an assisted living facility (ALF) while co-existing with residents who possess a cognitive impairment.

PROBLEM

There is limited research available that explores an individual’s experience and satisfaction when transitioning to an ALF, specifically when the individual is cognitively intact and is co-existing with other individuals who have a cognitive impairment such as dementia.

SIGNIFICANCE

Relocating to an assisted living facility (ALF) is a common life changing experience for older adults and requires adjusting to a new way of life and living environment. Occupational therapists (OTs) can have an important role in assisting residents in maintaining or reestablishing participation in meaningful occupations and adapting to new routines. OTs can offer support in psychosocial aspects including: adjusting to the transition, dealing with feelings of loss, thoughts of dependence and decline, and coexisting and interacting with those who possess a cognitive impairment. It is essential to gain further understanding of the components involved in an individual’s transition to benefit future residents and ALF staff members.

PURPOSE

The aim of this multi-paradigm study is to explore the transitional experience of residents who are cognitively intact and their interaction with residents who possess cognitive impairments, such as dementia. A second aim was to compare participants’ length of stay (LOS), transition level, and the overall Quality of Life (QLI) score using a correlational approach. Upon completion of this study the researchers aim to answer the following questions:

1. How will participant’s coexistence and interaction with those that possess a cognitive impairment impact their transition to an ALF?
2. How does their transition to an assisted living facility affect their quality of life?

METHODS

Participants:

The eleven participants were individuals who had transitioned into an ALF at least one month prior to the beginning of the research study between 70 to 95 years old. The ALF coordinator referred residents that met the following inclusion criteria: at least one month at the ALF and scored a minimum of 25/30 on the Mini-Mental State Examination (MMSE), which meant residents were considered “cognitively intact”.

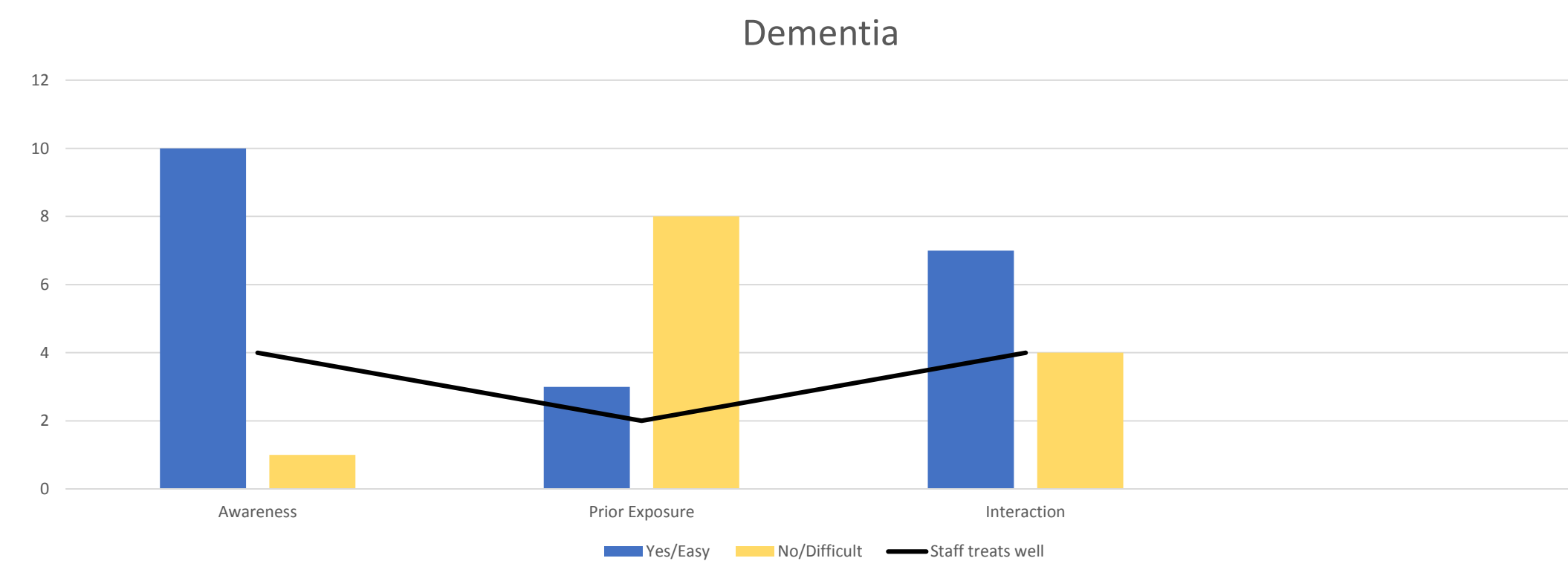
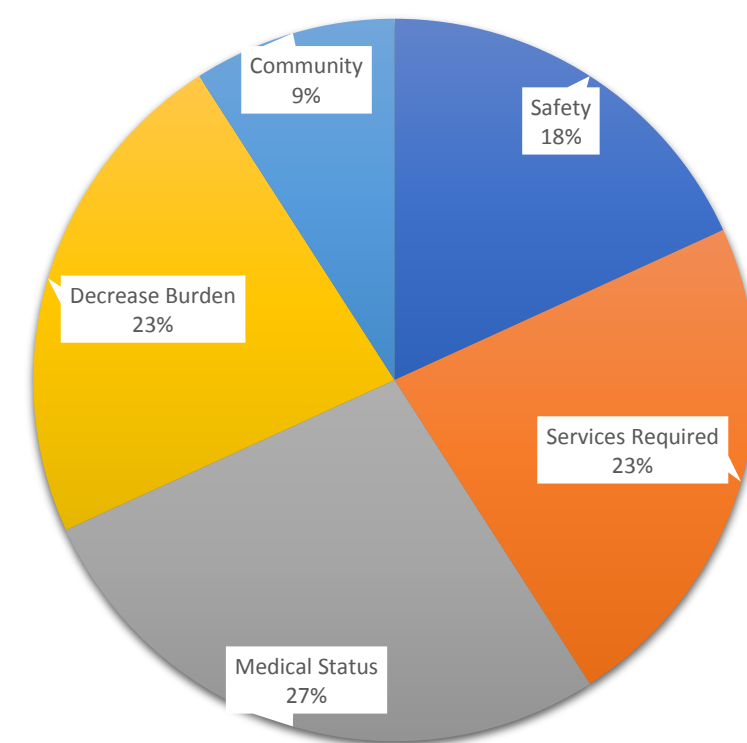
Data collections:

- The Quality of Life (QLI) Nursing Home Version- III
- Semi-structured interviews.
- Field notes.
- SPSS comparing length of stay, quality of life, transitional experience

RESULTS

Common themes were found within the qualitative data regarding participants’ transition. No significant relationship was found among length of stay, transition level, and total QLI scores, when using the Spearman and Kendall Tau Correlation Coefficients.

Themes of Relocation



Spearman's Rank Correlation Coefficient					
Spearman's rho	LOS	Correlation Coefficient	LOS	Transition	TotalQLI
			1.000	-.101	-.174
			Sig. (2-tailed)	.767	.609
	Transition	Correlation Coefficient	N	11	11
			-.101	1.000	.289
			Sig. (2-tailed)	.767	.389
	TotalQLI	Correlation Coefficient	N	11	11
			-.174	.289	1.000
			Sig. (2-tailed)	.609	.389
	N		11	11	11

DISCUSSION

- Quantitative data showed no statistical significance
 - Found common themes of value within the qualitative results.
- Control over the decision impacted transition
 - Two participates w/ spouses-easy transition
 - All participants having difficult transition did not personally make decision
- Participants mentioned loss of freedoms such as driving
- Expressed less worries and gained overall sense of security/safety
- Three articles mentioned social factors influenced transition
 - Social factors did not directly influence transition, influenced activity participation
- When asked thoughts on cognitive impairments, surprisingly none of the participants associated their need for transition with eventual cognitive decline and/or dementia in any interview.
 - The researchers felt that prior experiences/exposure helped them to be more patient and understanding of individuals who have a cognitive impairment.
- ALF is religiously affiliated
 - Compassionate and respectful atmosphere.

CONCLUSION

Participants who scored higher on the Quality of Life Index- Nursing Home Version- III (QLI) would have an easier transition into the ALF. **Assumption 1 (not true)**
The participants who had been at the ALF for a longer period of time would have a higher score on the QLI.

Assumption 2 (not true)

Interaction with residents who possess a cognitive impairment would contribute to the transitional experience of residents who are cognitively intact.

Assumption 3: There was not a positive or negative correlation between these variables that was evident within the data. Participation has the potential to affect transition, but nothing definitive was found that supports this assumption.

- Results can not be generalized
- Published literature are qualitative studies
- Future research needs to be done

ACKNOWLEDGEMENT

The researchers would like to thank the participating ALF, Dr. Joseph Cipriani Ed.D., OTR/L, and the staff at Misericordia University. The researchers would also like to thank Dr. Carol Estwing Ferrans, Ph.D., RN, FAAN for providing access to the QLI for use in this study.

REFERENCES

- References available upon request

Integrating Research and Fieldwork in a Master of Occupational Therapy Program

Orley Templeton, OTD, OTR/L, Lori Charney, OTD, OTR/L, Ellen McLaughlin, Ed.D, OTR/L

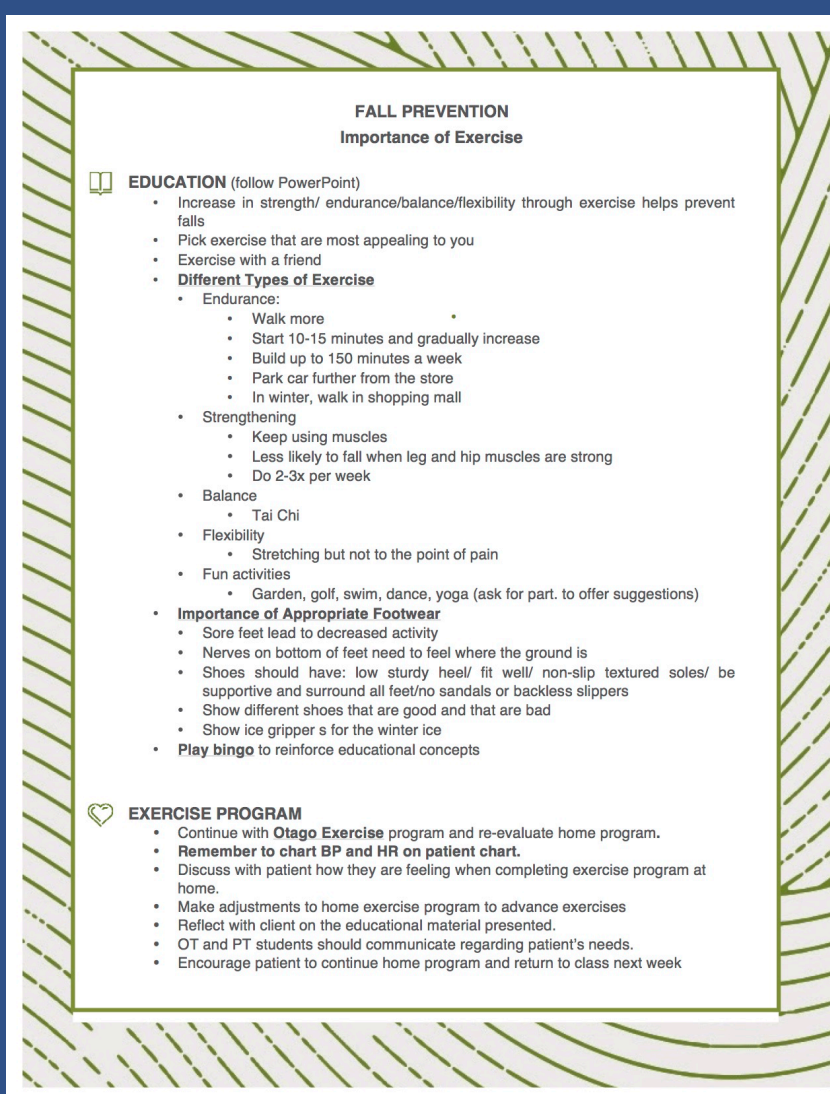


Falls Prevention

Innovative
Level I FW
Experiences

Problems Addressed Through This Model

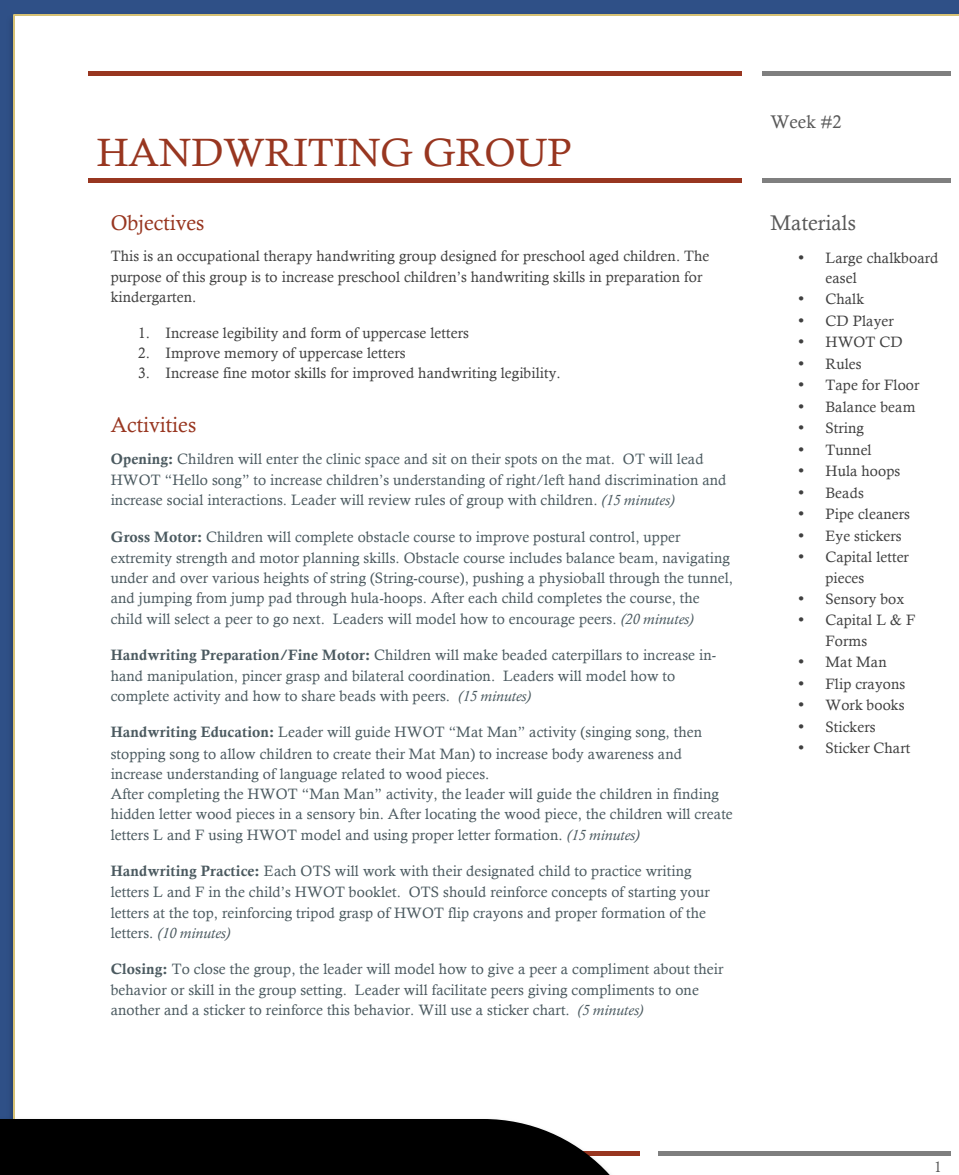
- Decreased availability of fieldwork sites (Mattilla & Dolhi, 2016)
- Can potentially address psychosocial fieldwork standard C.1.7 and contributes to C 1.1, 1.8, 1.10 and 1.11 (ACOTE, 2011).
- Application of didactic information from the classroom to practice is real rather than simulated
- Lack of community programming (Rydeen, Kautzmann, Cowan & Benzing, 1995) and can be addressed at a local and regional level
- Issues with interpersonal skills of students can be addressed in real time



Handwriting Group

Mentor & Multiple
Protégé Design

(Nolinske, 1995)



Skills Obtained Through the Process

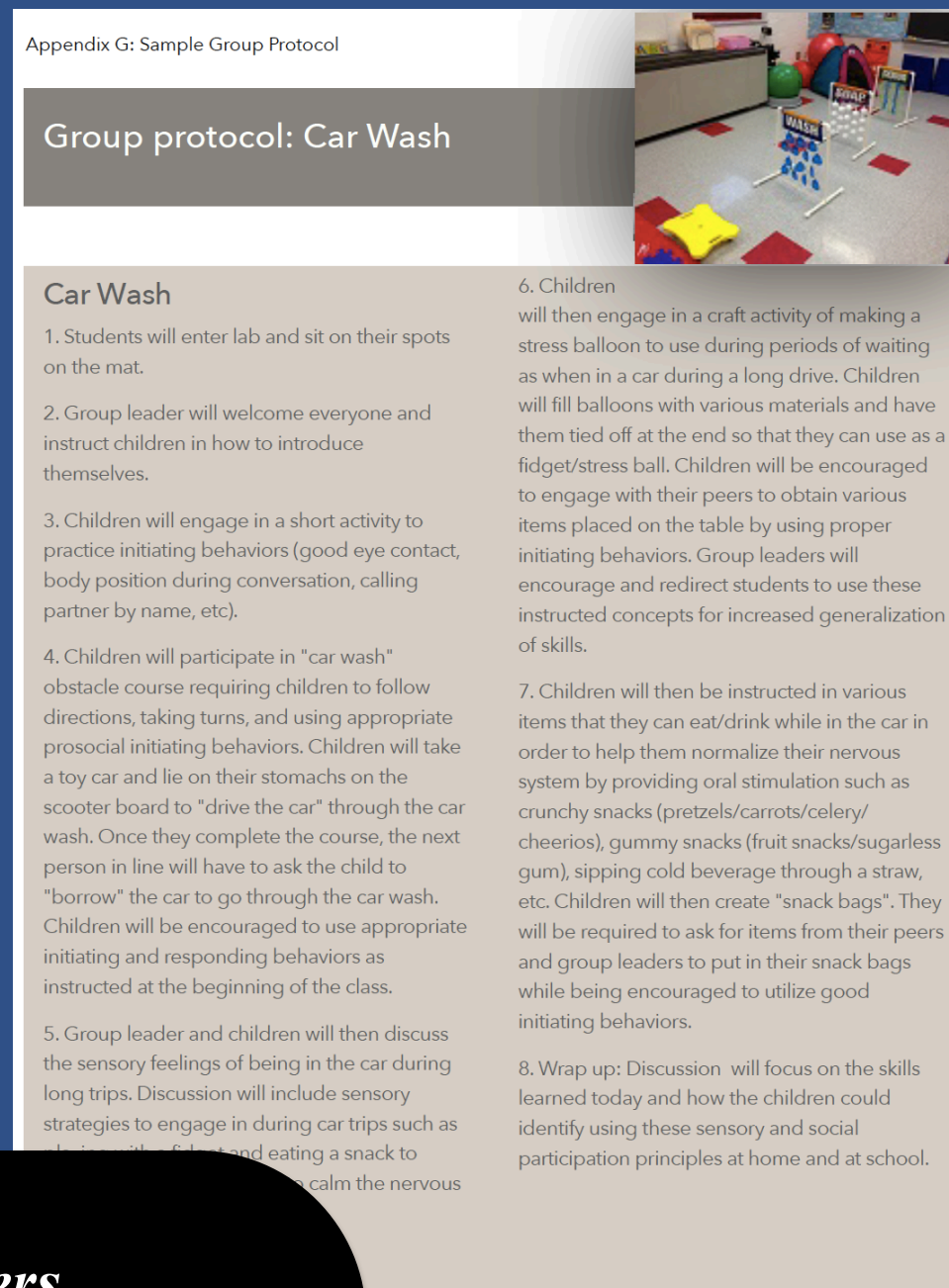
- Encourages group problem solving and clinical confidence (de Jongh, 2012)
- Fosters collaboration (Grenier, 2016)
- Provides opportunistic learning (Kirke, Layton, & Sim, 2007)
- Requires both planned and instantaneous application of didactic information to practice



Integration of
Research

Develops Evidence Based Practitioners

- All programs are developed to directly correlate theory to practice (de Jongh, 2012)
- Students design and implement research, addressing ACOTE Masters Standards B8.1 through 8.7, under faculty direction and supervision
- Students apply clinical outcome measures and analysis



Sensory Social Group

“Faculty led fieldwork gave me the chance to develop skills in a small group for a population that I required more time and training to interact with” (student comment).

“The combination of Level I FW and research provided a more intense hands on approach to clinical skills. It also provided me with the opportunity to more thoroughly examine the evidence behind the techniques we employed” (student comment).

Enhanced Clinical Reasoning

(Naidoo & Van Wyk, 2016)

“This is a great format to get students more I interested in research and a way to culminate better clinical OT research” (student comment).

“I felt as though I could be asked any question about research and could confidently answer it because I experienced all aspects of it” (student comment).

- References
- ACOTE. (2011). *2011 Standards and interpretive guide – December 2011 version*. Pdf [PDF file]. (2012). Retrieved from <http://www.aota.org/media/Corporate/Files/EducationCareers/Accredit/Standards/2011-Standards-and-Interpretive-Guide.pdf>
- de Jongh, J.-C. (2012). Undergraduate occupational therapy students' engagement in qualitative research: Identifying research problems and questions through reflection while in a community fieldwork setting. *South African Journal of Occupational Therapy*, 42, 35-39.
- Grenier, M. (2015). Facilitators and barriers to learning in occupational therapy fieldwork education: Student perspectives. *American Journal of Occupational Therapy*, 69(Suppl. 2), 6912185070. DOI: 10.5014/AJOT.2015.015180
- Kirke, P., Layton, N., & Sim, J. (2007). Informing fieldwork design: Key elements to quality in fieldwork education for undergraduate occupational therapy students. *Australian Occupational Therapy Journal*, 54, S13-S22. DOI: 10.1111/J.1440-1630.2007.00696.x
- Mattilla, A., & Dolhi, C. (2016). Transformative experience of master of occupational therapy students in a non-traditional fieldwork setting. *Occupational Therapy in Mental Health*, 32(1), 16-31. DOI: 10.1080/0164212X.2015.1088424.
- Naidoo, D., & van Wyk, J. (2016). Fieldwork practice for learning: Lessons from occupational therapy students and their supervisors. *African Journal of Health Professions Education*, 8, 37-40. DOI: 10.7196/AJHPE.2016.v8i1.536
- Nolinske, T. (1995). Multiple mentoring relationships facilitate learning during fieldwork. *American Journal of Occupational Therapy*, 49(1), 39-43.
- Rydeen, K., Kautzmann, L., Cowan, M., & Benzing, P. (1995). Three faculty-facilitated, community-based level I fieldwork programs. *American Journal of Occupational Therapy*, 49, 112-118.





EFFECTIVENESS OF SENSORY AND SOCIAL GROUP INTERVENTIONS TO IMPROVE THE PARTICIPATION OF CHILDREN WITH ASD VIA GOAL ATTAINMENT SCALING

Lori Charney, OTD, OTR/L, Ellen McLaughlin, Ed.D., OTR/L, Felicia Bartello, OTS, Jonathan Jorda, OTS, Erin Soulsby, OTS, Desirae Waltman, OTS

Background

- Research conducted by Hochhauser and Engel-Yeger (2010) confirmed a correlation between sensory processing difficulties and social participation in children with ASD, leading to decreased engagement in social activities with other children.
- Systematic reviews have confirmed that sensory integration (SI) strategies improve motor skills, academics, behavioral regulation, and social skills (May-Benson & Koomar, 2010, p. 408).
- Researchers have suggested the use of interventions that provide specific instructions regarding social skills, such as appropriate initiating and responding behaviors, are effective in treating sensory processing dysfunction in children with ASD (Cosbey, Johnston, & Dunn, 2010, p. 472).

Purpose

- The purpose of this study is to determine the effectiveness of a group intervention, combining SI techniques with social skills training, on the social behaviors of children with ASD via individualized measures of Goal Attainment Scaling (GAS) in a single subject design.

Sensory Social Group

- Children aged 6-12 with a diagnosis of ASD and related sensory and social challenges participated in a weekday summer camp.
- 2 hour intervention sessions were held, over a four week period, for a total of 16 sessions in July 2015.
- Sessions developed by OT professor and implemented with 4 Level I fieldwork students in the entry-level Masters OT program
- Place: Misericordia University campus



Test Measures

Sensory Processing Measure (SPM)
Social Responsiveness Scale (SRS-2)
Gilliam Autism Rating Scale (GARS)
Social Skills Rating Form (SSRF)
Goal Attainment Scaling (GAS)

Participants

6 Participants aged 6-12
GARS determined level of ASD:
Level 2 ASD: "requiring substantial assistance"
4 participants
Level 3 ASD: "requiring very substantial support"
2 participants

Procedures

Parent Screening questionnaire
Semi-structured parent interview (SPM, SRS-2, GARS)
Development of GAS for each participant
Daily data tracking of social skills (SSRF)



Circle Time

- Subjects engaged in short activity to learn social skills (i.e: turn towards peer, make good eye contact, and use peer's name)

Obstacle Course

- Subjects participated in sensory based obstacle courses which required following directions, taking turns, and using appropriate prosocial behaviors

Craft

- Subjects engaged in a sensory craft each day to develop a sensory toy box
- Group leaders encouraged and redirected students to use prosocial behaviors to promote generalization of skills

Snack Time

- Subjects created and ate snacks which provided various sensory input.
- Students were required to ask for items from their peers and group leaders while making their snacks to encourage prosocial behaviors

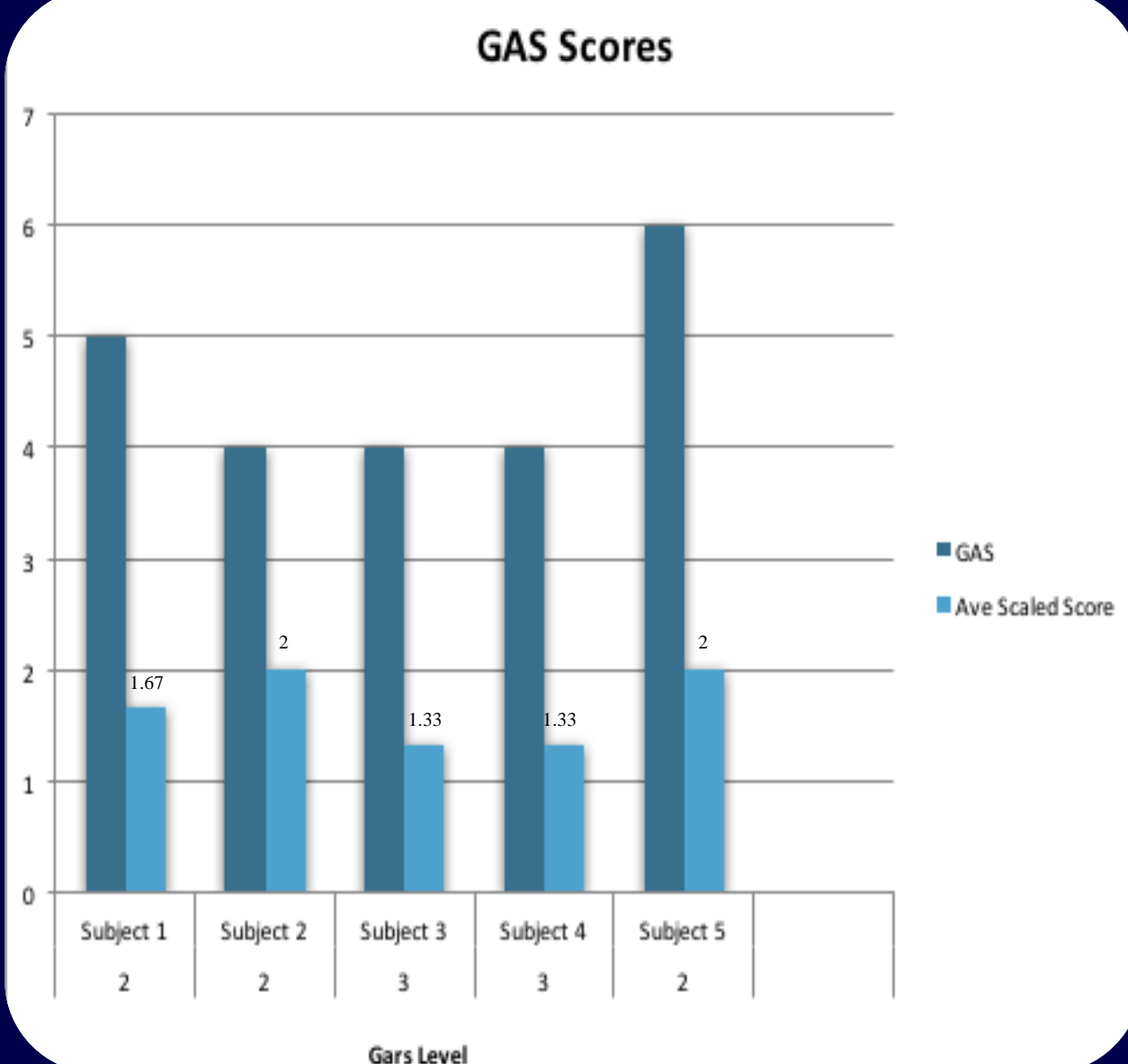
Goal Attainment Scaling

Score	Explanation
+2	Much more than expected outcome
+1	More than expected level of outcome
0	Expected level of outcome
-1	Less than expected level of outcome
-2	Much less than expected outcome

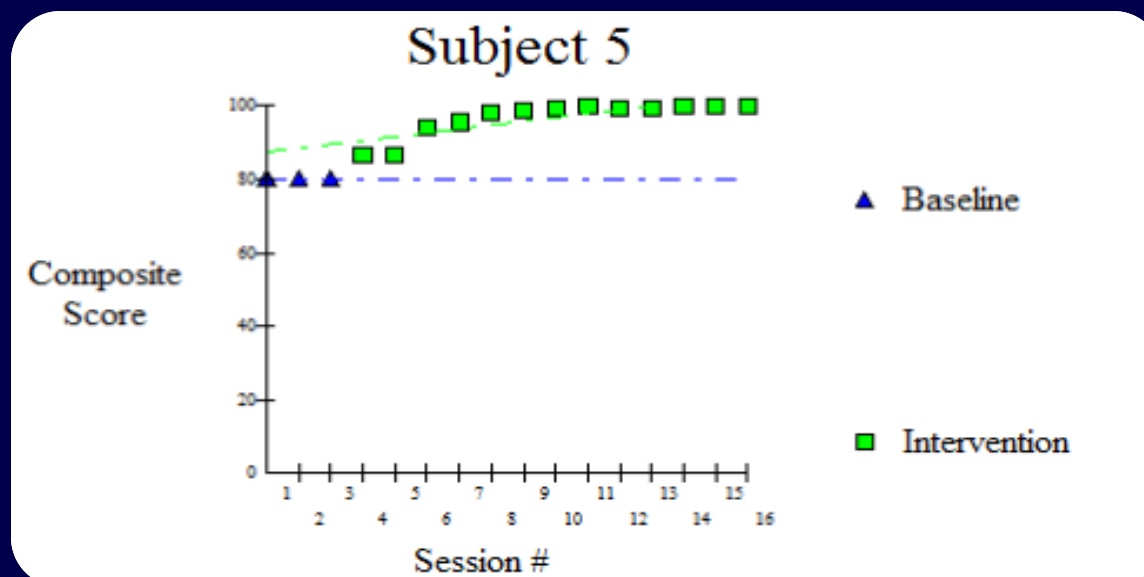
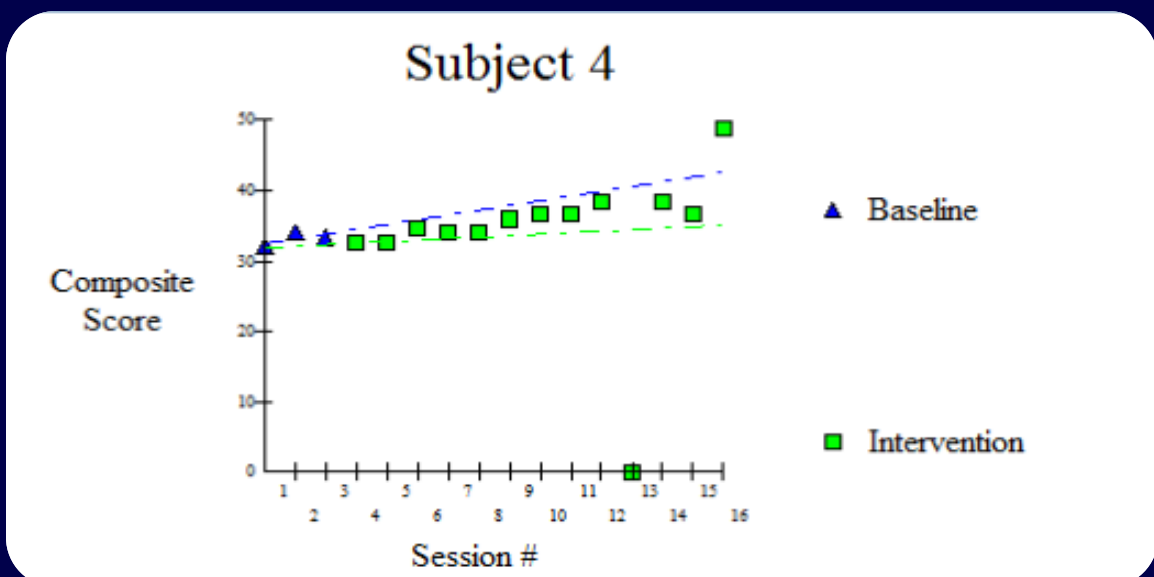
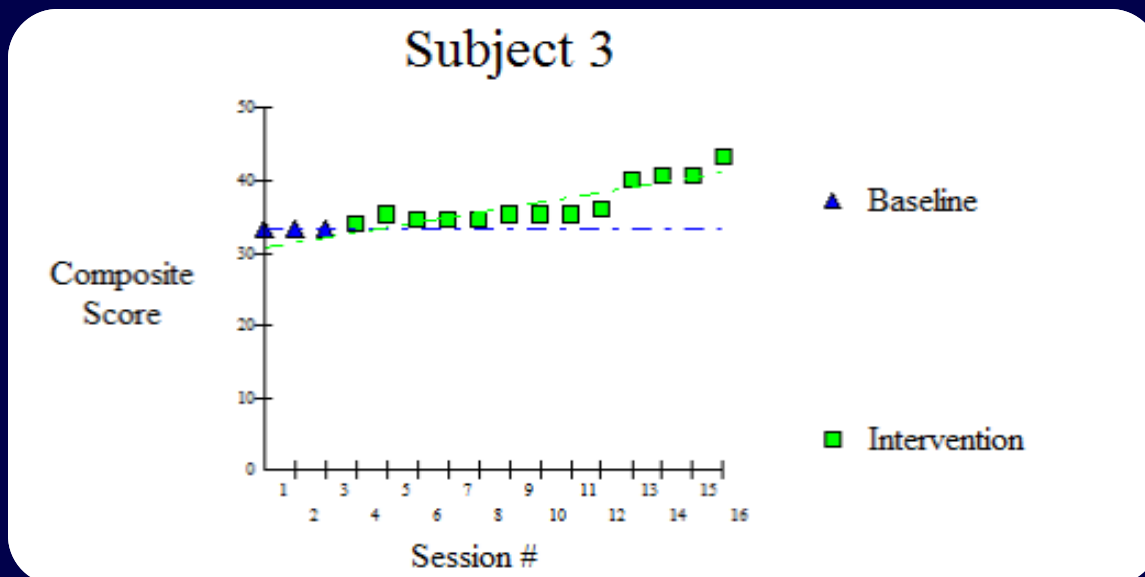
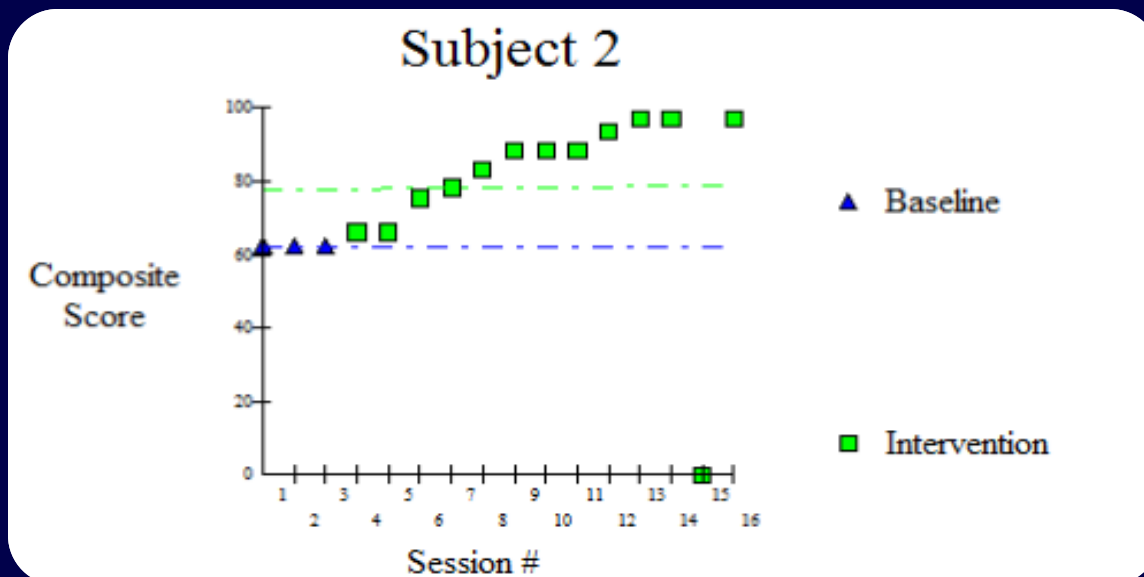
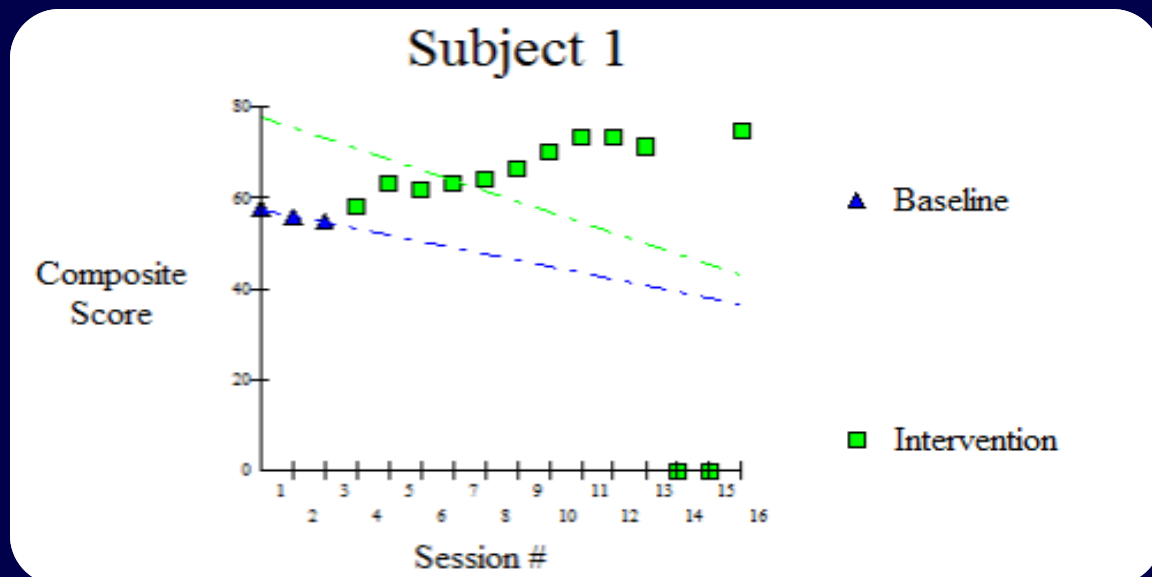
GAS is a quantitative measurement that shows evidence of client's individualized gains.

Incorporating GAS in treatment planning provides a clear statement of intended outcomes.

Goals were formatted and scaled based on the SSRF components: initiating behaviors, responding behaviors, emotional regulation, self-regulation, & peer interactions. Parents were consulted on possible goal attainment areas. An independent evaluator developed the goals at baseline and assessed the goal achievement at the end of the treatment phase.



Results



Discussion

According to the result of GAS, all participants met or exceeded expected levels of outcomes.

The visual analysis of individualized results indicate that all subject's social participation skills improved along the course of the 16 day camp.

4/5 participants showed significant improvements. Subject #4's results may be attributed to poor behaviors that affected consistency in participation.

Recommendations

Future studies should include an increased number of sessions and a larger sample size.

In addition, a comparison control group and inclusion of participants of various genders and ages may increase generalizability.

Post tests should be implemented at 3 and 6 months in order to assess carry over of instructed skills.

Abstract.

Patients who have experienced a cerebrovascular accident (CVA) often exhibit psychological and emotional changes **that** can have a severe impact on physical, cognitive and social abilities. The literature on post stroke depression (PSD) is prevalent and indicates that 18-38% of all geriatric patients who have experienced a stroke are affected^{6,10,3,9} and that PSD is highly under diagnosed⁹. Research shows that depressive symptoms have moderate to severe effects on ADLs, participation in physical rehabilitation, and motivation to engage in meaningful experiences^{4,3}. Based on current evidence a protocol for inpatient rehabilitation settings was developed to screen for PSD. Upon 48 hours of admission all patients diagnosed with stroke are to receive a referral to psychiatry and the OT will screen for PSD.

Literature Review

A thorough investigation of screening tools for PSD yielded 39 articles with 20 different tools. Psychometric properties and the highest level of evidence led to the 5 selected screening tools. These were then divided into 5 categories based on level of cognition and presence or absence of aphasia. By classifying each tool to a different level this increases the protocols ease of use and allows the OT to make a quick clinical decision which is supported by current evidence..

Method.

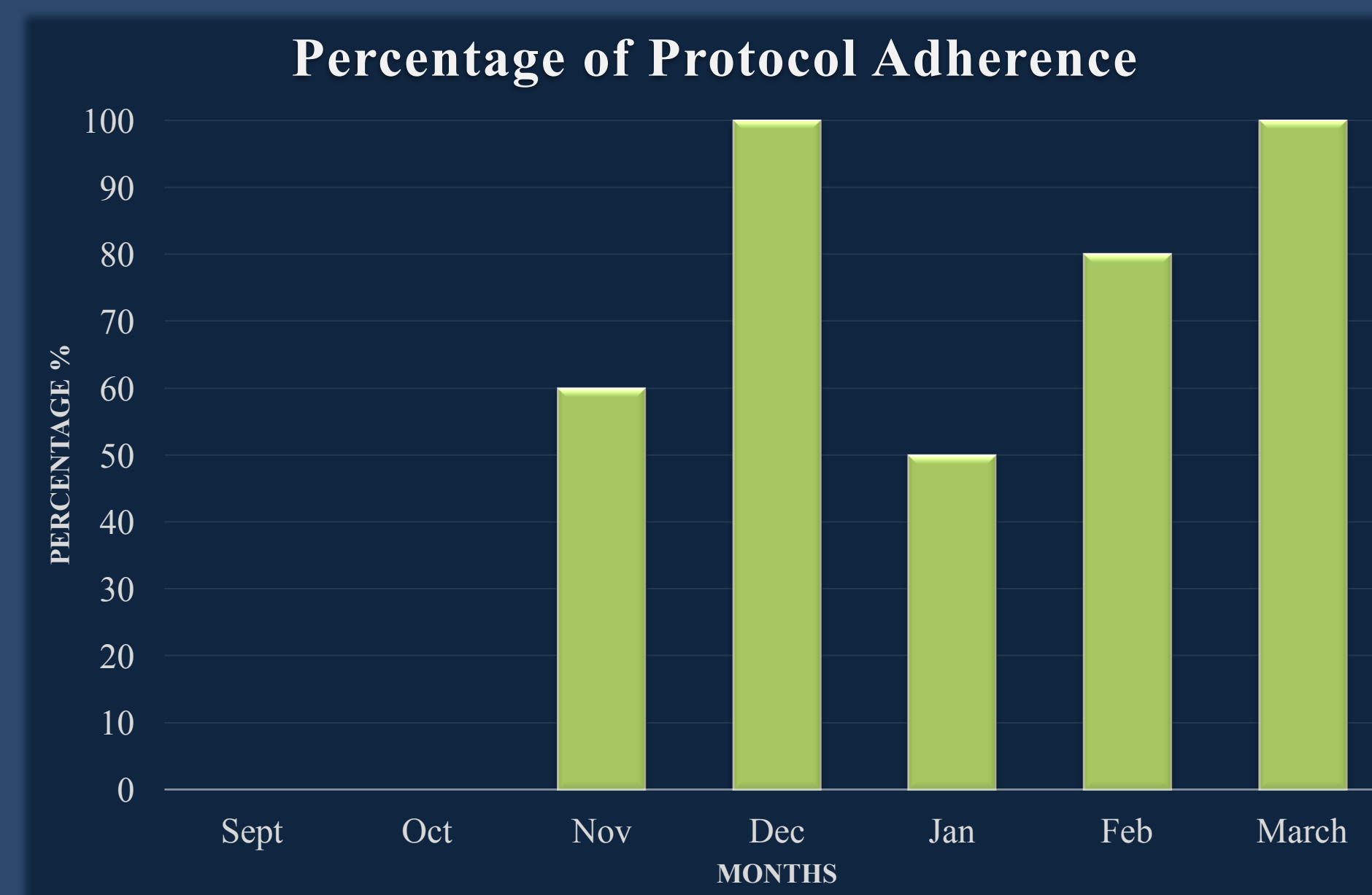
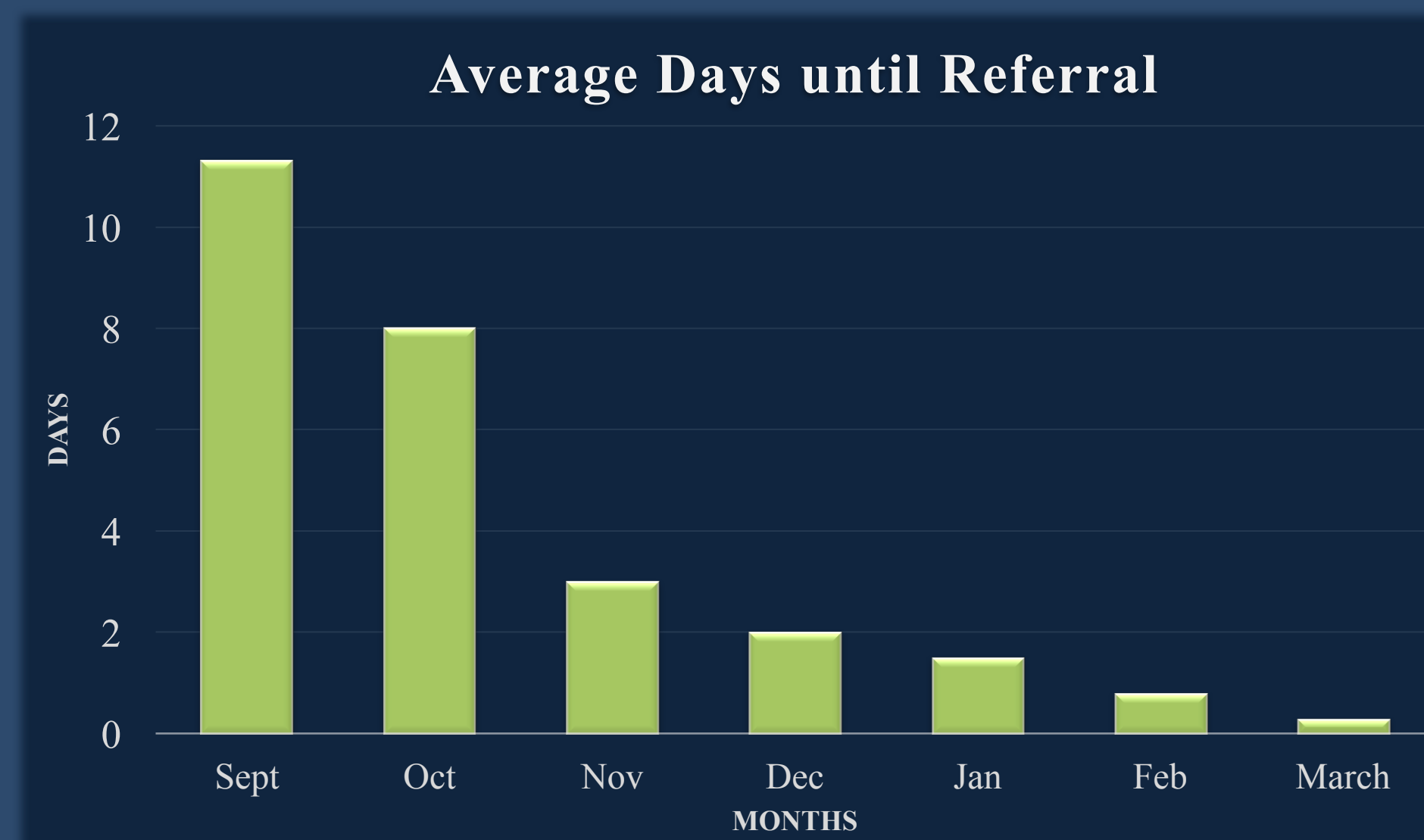
Prior to beginning the protocol data was collected based on amount of time until the referral was submitted and how many patients received a referral. This data, the baseline phase, was then compared to the implementation phase to determine if the protocol was successful.

References

- 1) Bennett, H. E., & Lincoln, N. B. (2006). Potential screening measures for depression and anxiety after stroke. *International Journal of Therapy and Rehabilitation*, 13(9), 401-406.
- 2) Cinamon, J. S., Finch, L., Miller, S., Higgins, J., & Mayo, N. (2011). Preliminary evidence for the development of a stroke specific geriatric depression scale. *International Journal of Geriatric Psychiatry*, 26, 188-198.
- 3) Dwyer-Hollender, K. (2014). Screening, diagnosis, and treatment of post-stroke depression. *American Association of Neuroscience Nursing*, 46(3), 135-141.
- 4) Falk-Kessler, J. (2011). Psychological aspects of stroke rehabilitation. In Gillen, G (3rded). *Stroke rehabilitation: A functional-based approach*. (pp. 49-65). St. Louis, MO: Elsevier Moby.
- 5) Ginkel, J. M., Gooskens, F., Schepers, V., Schuurmans, M. J., Lindeman, E., & Hafsteinsdottir, T. B. (2012). Screening for poststroke depression using the Patient Health Questionnaire. *Nursing Research*, 61(5), 333-341.
- 6) Hackett, M. L., Chaturangi, Y., Varsha, P., & Anderson, C. S. (2005). Frequency of depression after stroke: A systematic review of observational studies. *Stroke, American Heart Association Journal*, 36(6), 1330-1340.
- 7) Haringsma, R., Engels, G. I., Beekman, A. T. F., & Spinhoven, P. (2004). The criterion validity of the Center for Epidemiological Studies Depression Scale (CES-D) in a sample of self-referred elders with depressive symptomatology. *International Journal of Geriatric Psychiatry*, 19, 558-563.
- 8) Irwin, M., Artin, K. H., & Oxman, M. N. (1999). Screening for depression in the older adult: Criterion validity of the 10-item center for epidemiological studies depression scale (CES-D). *Archives of Internal Medicine*, 159, 1701-1704.
- 9) NIMH. (2011). *Depression and Stroke*.
- 10) Pohjasvaara, T., Leppävuori, A., Siira, I., Vataja, R., Kaste, M., Erkinjuntti, T. (1998). Frequency and Clinical Determinants of Poststroke Depression. *Stroke, American Heart Association Journal*, 29(11), 2311-2317.
- 11) Roger, P. R., & Johnson-Greene, D. (2009). Comparison of assessment measures for post-stroke depression. *The Clinical Neuropsychologist*, 23, 780-793.
- 12) Sagen, U., Finset, A., Moum, T., Morland, T., Vik, T. G., Nagy, T., & Dammen, T. (2010). Early detection of patients at risk for anxiety, depression and apathy after stroke. *General Hospital Psychiatry*, 32, 80-85.
- 13) Sagen, U., Vik, T. G., Moum, T., Morel, T., Finset, A., & Dammen, T. (2009). Screening for anxiety and depression after stroke: Comparison of the Hospital Anxiety and Depression Scale and the Montgomery and Asberg Depression Rating Scale. *Journal of Psychosomatic Research*, 67, 325-332.
- 14) Sivrioglu, E. Y., Sivrioglu, K., Ertan, T., Ertan, F. S., Chankurtaran, E., Aki, O., ... Kirli, S., (2009). Reliability and validity of the Geriatric Depression Scale in detection of poststroke minor depression. *Journal of Clinical and Experimental Neuropsychology*, 31(8), 999-1006.
- 15) Sutcliffe, L. M., & Lincoln, N. B., (1998). The assessment of depression in aphasic stroke patients: The development of the Stroke Aphasic Depression Questionnaire. *Clinical Rehabilitation*, 12, 506-513.
- 16) Tang, W. K., Wong, E., Chiu, H., & Ungvari, G. S. (2006). Rasch analysis of the scoring scheme of the HADS depression subscale in Chinese stroke patients. *Psychiatry Research*, 150, 97-103.
- 17) Williams, L. S., Brizendine, E. J., Plue, L., Bakas, T., Tu, W., Hendrie, H., & Kroenke, K. (2005). Performance of the PHQ-9 as a screening tool for depression after stroke. *Stroke: American Heart Association Journal*, 36, 635-638.

Results

Prior to launching the protocol data was gathered at a baseline phase which indicated that approximately 47% of stroke patients on the inpatient rehabilitation unit received an appropriate referral in an average of 6 days. During the implementation phase 90% of the patients received a referral with an average of 1.15 days.



This project was completed as a capstone requirement for the post professional doctoral program at Misericordia University under the mentorship of Ellen McLaughlin, Ed.D., OTR/L.

Normal Cognition and Absence of Aphasia

Hospital Anxiety and Depression Scale

- **High validity**¹
- **Good predictive values**¹²
- **Good sensitivity**¹³ (with medically stable population)
- **Good reliability**¹⁶

Center for Epidemiological Studies Depression Scale

- **Good sensitivity, specificity and predictive values**⁸
- **High internal consistency**⁷
- **Good reliability**⁷
- **Satisfactory criterion validity**⁷

Personal Health Questionnaire

- **Good reliability, rest-retest, internal consistency and clinical utility**⁵
- **Good sensitivity and specificity**¹⁷

Mild to Moderate Cognitive Deficits and Aphasia

Geriatric Depression Scale Short-Form

- **Good predictive value, sensitivity, specificity & clinical utility**¹¹
- **High discriminant validity, internal consistency & test-retest reliability**¹⁴
- **Acceptable concurrent validity**²

Moderate to Severe Cognitive Deficits and Aphasia

Stroke Aphasia Depression Questionnaire-Hospital Version

- **High validity with communication difficulties**¹
- **Higher validity with shorter version of 10 questions**¹⁵
- **Acceptable clinical utilization**¹⁵

Multisensory Based Curriculum for Preschool Children: Blending OT and Teaching

MISERICORDIA UNIVERSITY OCCUPATIONAL THERAPY DEPARTMENT, DALLAS PA & BRIGHT BEGINNINGS EARLY LEARNING ACADEMY, CONYNGHAM PA

Jennifer Dessoye OTD; Kristin Beurmann MS SE; Casey Herseim MS ECE



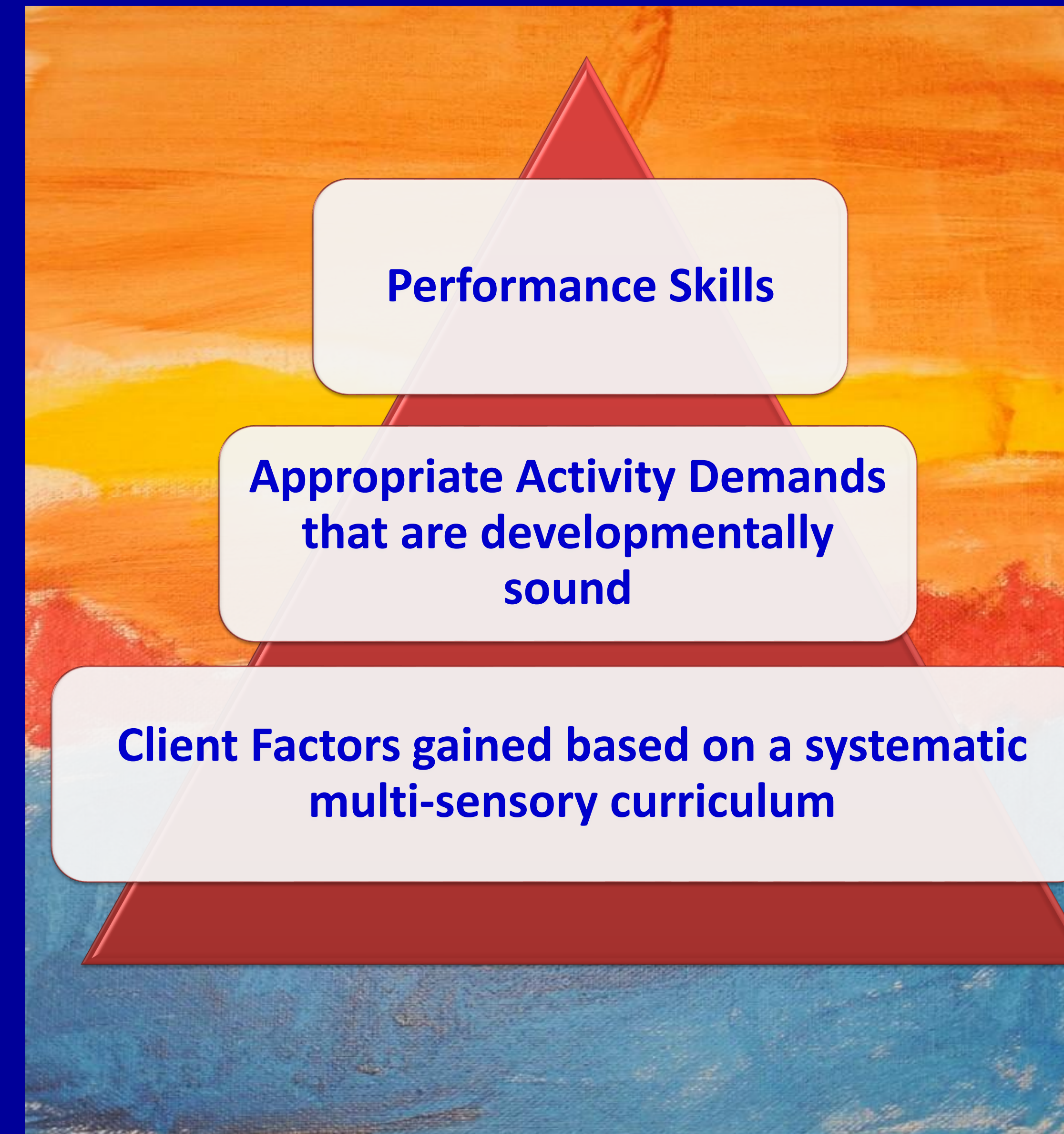
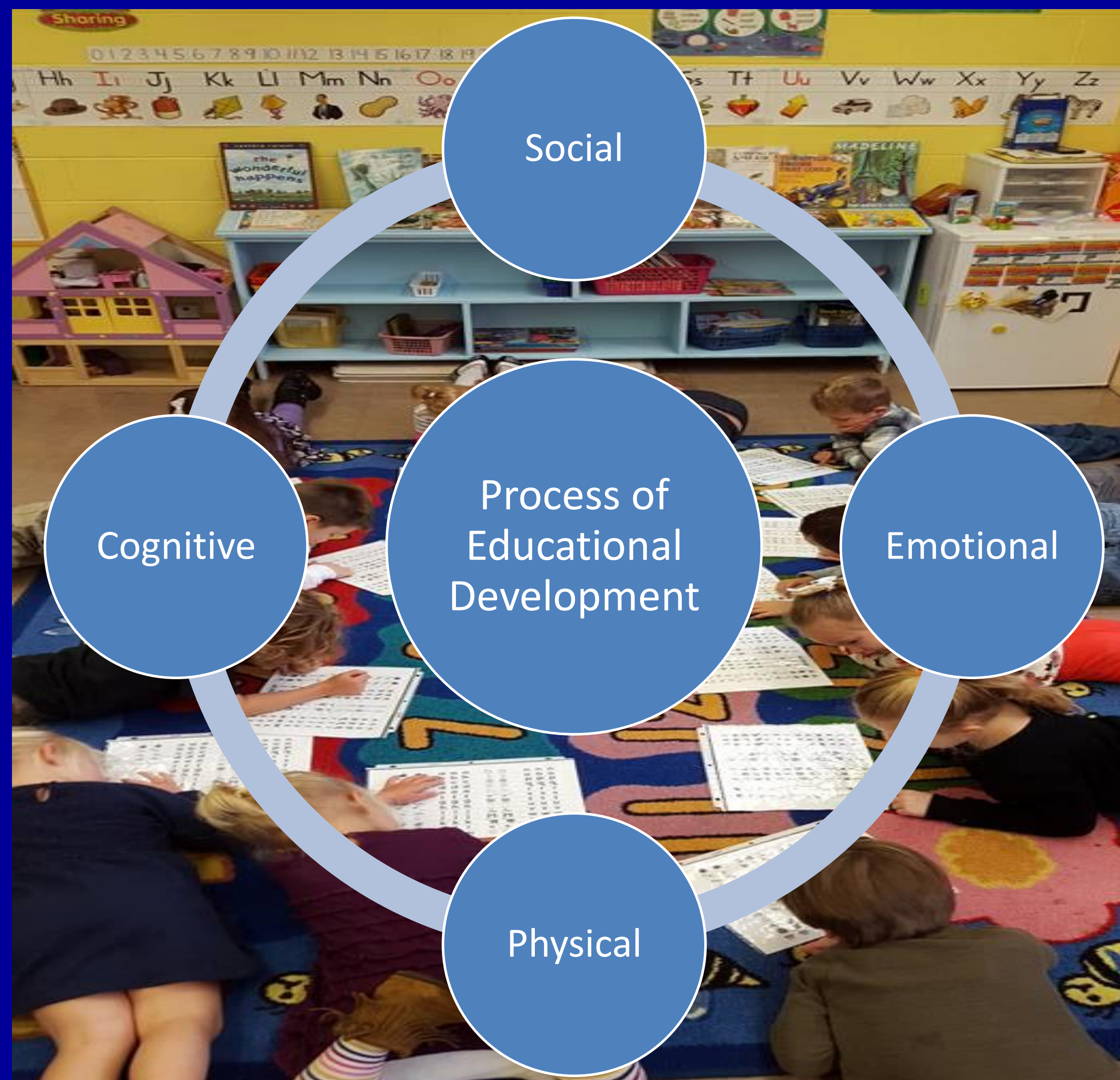
Center-Based Multisensory Learning Curriculum

Standard Curriculum – Adherence with the National Association for the Education of Young Children (2014) and the adoption of the Common Core State Standards in 42 states is often taught in traditional settings. Traditional curriculums may prevent making the connections and generalizations that can be achieved through an engaging and interactive learning experience, such as multi-sensory center-based curriculum.

Community-Based – Several studies investigated the effect of community-based programs on child development. One community-based program study aimed to promote well-being and healthy child development, paralleling various goals of this study's community-based multi-sensory center-based learning curriculum (Worton, 2014).

Small Group Instruction – Waslik (2008) found that dividing students into small groups incorporates opportunities for social contact while allowing children “to express themselves, receive feedback from the teacher, and have the opportunity to respond to the feedback” (p. 519).

Center-based – activities provide the opportunity to explore the classroom. One study found “center-based childcare programs in the community may be beneficial for fostering school readiness” (Winsler, 2008).



9:00-9:30 Morning Meeting (Whole Group)
9:30-10:30 Science /Math Standards (Small Groups)
10:45-11:00 Reading and Story Sharing Opportunity
11:00-12:00 Language Arts/Social Studies (Sm Group)
12:00-12:30 Health & Wellness/ Gross Motor Activity (Whole Group)
1:00-1:30 Free Choice Play/ Recess (Whole Group)
1:30-2:00 Arts and Humanities (Whole or Small Group)
2:00-2:45 Project Based Learning Experience (Individual, Whole or Small Group based on interest and content) *Re-teach & Enrich from morning activities Objective: Students will have the opportunity to research, develop and complete ongoing projects based on group interest and cooperative decision. Projects will incorporate all learning standards and allow students to independently choose how they prefer to contribute to the group learning experience. Teachers will guide students on the exploration, but allow research, initiative and curiosity to guide the learning experience.

2:45-3:00 Closing Meeting (Whole Group)

Students will review accomplishments of the day. The group will make plans and set goals for home and the following school day.

Any home-school partnership notes will be acknowledged in planners.





Development and Implementation of an Interdisciplinary Minor in Medical and Health Humanities within an Occupational Therapy Education Program



Joseph Cipriani, Ed.D., OTR/L, Professor, O.T. Dept. (jciprian@misericordia.edu)

Amanda Caleb, Ph.D., Program Director, Medical
and Health Humanities Program (acaleb@misericordia.edu)

Background

A review of educational offerings at liberal arts based Misericordia University was undertaken in the context of promoting more multidisciplinary programs and interdisciplinary course offerings to meet the needs of the twenty-first century. This led to the creation of a new major and minor – Medical and Health Humanities (MHH) – by a team of faculty from the colleges of Arts and Sciences and the College of Health Sciences and Education. The field of Medical and Health Humanities is defined as an inter and multidisciplinary field that explores contexts, experiences, and critical and conceptual issues in medicine and health care, while supporting professional identity formation (Cole, Carlin & Carson, 2015).

Opportunities and Match for O.T.

The Blueprint for Entry-Level Education in occupational therapy (Baum et al., 2010) has four main sections: person, environmental, occupation and professional factors. In each section, major topics and concepts are identified, including the science behind each. For example, a person factor topic is spirituality and its impact on wellbeing. A concept studied in philosophy – the mind-body connection, is discussed in philosophy courses at Misericordia such as *Philosophy of Person* and also *Philosophy of Medicine*. A minor in MHH can provide the O.T. student with the opportunity to view healthcare delivery and experiences through a variety of lenses: cultural, familial, spiritual, mental and social. A marriage is born.

References

Baum, C., et al. (2010). Blueprint for entry-level education. American Journal of Occupational Therapy, 64, 186-203.
Cole, T.R., Carlin, N.S., & Carson, R.A. (2015). Medical humanities: An Introduction. New York, NY: Cambridge University Press

Medical and Health Humanities Program Goals

1. Understand differences in perspective of holism and reductionism in the diagnosis, narrative, and definition of wellness;
2. Understand how non-medical disciplines contribute to the study and treatment of illness, disease and care, including social justice, historical, literary, ethical and philosophical perspectives;
3. Understand how cultural perspectives impact the concept of wellness;
4. Understand the concept of autonomy, beneficence, non-maleficence, and justice as they relate to the preservation of human dignity and rights;
5. Develop strong writing skills across multiple disciplines and addressed to various audiences;
6. Develop strong oral communication and presentation skills

Sample Courses in MHH Minor – 15 credits

Required: MHH 201: Introduction to Medical and Health Humanities

Two of the following:

ENG 305: Literature and Medicine

HIS 342: History of Medicine and Health

PHL 310: Medical Ethics

PHL 315: Philosophy of Medicine

MHH 301: Narrative Medicine

6 credits of electives (samples below from 19 options)

ENG 225: Disability and Literature

GER 277: Adult Development and Aging

HIS 165: The History of Human Rights

HP 220: American Sign Language

The Beginning

In the 2016-2017 academic year, the MHH minor was offered to students in five health science programs, and among the pioneer enrollees were six O.T. students. These students are currently taking the MHH 201 Intro course.

Sample Collaboration, or Going Really Interdisciplinary

In the fall 2016 term, Amanda Caleb facilitated a discussion in Joe Cipriani's OT class *Working with Non-Traditional Populations: The Homeless*, via the sculpture of Homeless Jesus, and having students read and discuss an excerpt from Josephine Ensign's book *Catching Homelessness*.

In the spring 2017 term in the Intro MHH class, Amanda Caleb has students read, discuss and reflect on a true short story written by occupational therapist Joe Cipriani about a highly unusual patient at a state psychiatric hospital. The story focuses on the attempts, and failures of , staff and other patients to develop a sense of empathy with this person. The class has a large mix of majors, including medical humanities, occupational therapy, physical therapy, medical imaging, nursing, and english.

Researching the Results

Joe Cipriani and Amanda Caleb conduct a research project on the use of integrative readings and reflective writing to affect empathy during the spring 2017 class, to be presented at the 11th Conference of the European Society for Literature, Science and the Arts in June 2017.



Creation and Implementation of a Full Semester International Service Learning Course in O.T. Education, Including Lessons from the Field

Joseph Cipriani, Ed.D., OTR/L, Professor, Occupational Therapy (jciprian@misericordia.edu)
Lalit Shah, Ed.D., OTR/L, Professor, Occupational Therapy



Background

Increasing interest in international practice can be seen by an expanding research base, plus educational offerings and statements from various leadership organizations in O.T.. Examples include a planned section within the 2017 Centennial issue of AJOT for Issue 6 on occupational therapy internationally (AOTA, 2016); and AOTA’s Strategic Vision Priorities for 2014-2017 including the enhancement of collaboration with international partners (AOTA, 2015).

International practice can be facilitated via practicing OT professionals, but also during entry-level and advanced O.T. education. Such experiences can be free standing (i.e., organized as a unique, separate element in a curriculum), embedded within part or all of a level I II fieldwork experience, or via a semester long course offering, with a culminating experience internationally. ***The last approach has been offered for 2 consecutive years at Misericordia University via a partnership with in an organization in Jamaica, Mustard Seed Communities, along with Therapy Missions (www.therapymissions.org).***

The amount of published research on international service learning, particularly within O.T. education, is sparse although increasing (e.g., Suarez-Balcazar, Hammel, Mayo, Inwald, & Sen, 2013; Cipriani, 2016; Tupe, Kern, Salvant, & Talero, 2015). Therefore, the authors did a review of the literature and found five key concepts that were used to develop the semester long course: *occupational justice, development of a reciprocal school-community partnership, cultural competence, guided self-reflection, and sustainability*. These five concepts formed the base from which course objectives, assignments, and teaching strategies were developed.

Course Title

OT 470: Non-Traditional Settings/Occupational Therapy Practices: International Populations

Sample Course Objectives

1. Describe the general aspects of the culture of Jamaica, with a focus on history, politics, economics, geography, resources, communication dynamics, and childhood development.
2. Describe health care practices, beliefs, and potential disparities, with a focus on a) types of common illnesses and injuries which may be treated, b) the beliefs of the host community about health and the nature of illness, c) the explanatory model for diseases in the host community, and d) preferred health care practices.
3. Describe, via reading research, what the role of the occupational therapist can be when serving traditionally underserved diverse populations.
4. Develop and implement an occupation based intervention which can help meet a specific need of persons from diverse underserved populations.
5. Reflect on their own personal experiences with persons from underserved populations via participation in an international fieldtrip, using the context of the 4 charisms and critical concerns of the Sisters of Mercy.
6. Describe, via reflection and readings, how pro bono service should be a required or strongly encouraged element of occupational therapy practice.

Implementation

This course in run in a full semester format, 3 academic credits, with the ISL component being one week at end.

Evaluation

Evaluation was conducted both with students from the class and the community partner,. The evaluation with the partner was conducted via conference call with key members of the agency and national representatives of the organization.

Excerpts- Student Journals

“There was something about the children doing purposeful and meaningful activitiesin addition to enjoyable and successful.....that I honestly don’t think I will ever doubt the power of occupation-based activities again.. It was life changing, and it made me ask myself if there is any other profession as important or rewarding?”

“If God has blessed me with the opportunity to learn the skill of occupational therapy and I can spread that throughout the world, then than how selfish would it be to only practice in my own country?”

Feedback from Community Partner

As noted under evaluation, the community partner was very satisfied overall, with significant carryover of staff training, use of donated equipment, and improved documentation and goal writing strategies.

Lessons from the Field

The importance of a dynamic, culturally sensitive school-community partnership with opportunities for learning by both groups cannot be overemphasized. Course objectives are guided by reflective journaling.

References

Available upon request.





Development of an Occupational Therapy Evaluation for Persons in an Emergency Homeless Shelter



Joseph Cipriani, Ed.D., OTR/L, Professor, Occupational Therapy (jciprian@misericordia.edu)

Background Info & Literature Review

Livingston and Miller (2006) describe the five-tiered continuum of care for the homeless: a) homeless prevention services, b) street outreach, c) emergency shelters, d) transitional services, and e) permanent housing. A literature review by the author, along with the results of a systematic review by Thomas, Gray and McGinty (2011) indicate that occupational therapy interventions to date have focused on meeting the needs of persons in transitional or permanent Housing.

Problem

Working with homeless populations is an emerging area of practice in occupational therapy, yet there is little research on evaluations and interventions for persons residing in emergency shelters.

Purpose

The purpose of this study was to describe the development of an occupational therapy evaluation which could be used in an emergency shelter for the homeless.

References

Law, M. & McColl, M.A. (2010). *Interventions, effects and outcomes in occupational therapy*. Thorofare, NJ: Slack.
Livingston, B.W. & Miller, K.S. (2006). Systems of care for persons who are homeless in the United States. *Occupational Therapy in Health Care*, 20 (3/4), 31-46.
Petrenchik, T. (2006). Homelessness: Perspectives, misperceptions, and considerations for occupational therapy. *Occupational Therapy in Health Care*, 20 (3/4), 9-30.
Thomas, Y., Gray, M. & McGinty, S. (2011). A systematic review of occupational therapy interventions with homeless people. *Occupational Therapy in Health Care*, 25 (1), 25-33.

Setting

The setting was *Ruth's Place*, a emergency homeless shelter for women (age 18+) in Wilkes Barre, Pennsylvania. The shelter has been in Existence since 2003, and is affiliated with Volunteers of America. It uses a "Housing First" model as its approach to service delivery.



Context

There currently is no occupational therapist at *Ruth's Place*. The author, along with eight students in an elective service learning class in occupational therapy at Misericordia University, volunteered to develop an evaluation which could be used by future groups to develop pro-bono services there.

Theoretical Approach

The Person-Environment-Occupation Model (Law & McColl, 2010) was used as a conceptual framework. The focus was on increasing participation of the residents by minimizing performance barriers and environmental constraints, along with expanding opportunities for mastery (Petrenchik, 2006).

Needs Assessment Steps

The author observed programming and interacted with residents. Next, a series of interviews was conducted with the director of case management services. It was important to consider the strengths of already existing programming at the center, which were many.

Identified Needs

1. The development of healthy leisure activities both during residence at the shelter, and to carry over to transitional housing for appropriate residents;
2. The development of computer skills which can impact satisfaction with occupational performance (especially selected IADLs).

Existing Assessments Modified

Two existing assessments in the literature were slightly modified:

1. The MOHO based Modified Interest Checklist to address leisure - <http://www.cade.uic.edu/moho/default.aspx>
2. The Computer Skills Assessment, to address computer learning needs – <http://www.collegetransition.org/docs/Computer%20Skills%20Assessment%20Pre-test..pdf>

Group Protocols Developed and Implemented

Based upon the results of the assessments, group protocols were developed for two groups:

1. Horticultural interest group
2. Computer skills group: use of the internet and Office packages.

Both groups were run consecutively over a four week interval, with one hour sessions, led by occupational therapy students from the elective class under the supervision of a faculty member.

Evaluation data collected indicated a high degree of satisfaction of the residents for each group.

Conclusion

An emergency homeless shelter has very fluid populations with multiple areas to address, with the shelter part of a complex continuum of care. This presents a great challenge, but also a great opportunity, for OTs to build partnerships with agencies to help meet present and future occupational needs of the persons who reside there.

Contemporary Issues and Trends Facing Occupational Therapy Faculty

Wilfredo Dones, OTS; Naromie Petit-Frere, OTS; Katlyn Dillow, OTS; Trevor Behler, OTS;
Dr. Grace S. Fisher Ed.D., OTR/L
Misericordia University Occupational Therapy Department, Dallas Pennsylvania

RESEARCH QUESTIONS

1.

What are the main issues affecting the OT faculty workforce?
2.

What factors contribute to a successful career in OT academia?

INSTRUMENTS

- ❖

Custom Designed Anonymous Internet-Based Survey
- ❖

Semi-Structured Follow-Up Telephone Interviews

RESULTS

Major Faculty Concerns

- ❖

Teaching Credit Loads (33.07%)
- ❖

Student Learning Styles (12.4%)
- ❖

Workloads (19.47%)
- ❖

Time Constraints
- ❖

Few Qualified Educators Available
- ❖

Student Professionalism
- ❖

Recruitment issues
- ❖

Inexperience with Research

Reported Facilitators of OT Faculty Success

- ❖

Time-Management Skill Development

- ❖

Mentorship between Experienced and Incoming Faculty

- ❖

Continued Education Programs:

•

Research Skills & Teaching Strategies

- ❖

Concurrent Practice in the Clinical Setting

- ❖

Utilizing a Variety of Teaching Strategies:

•

Blended Learning & Learning Management Systems (Blackboard, Canvas, Moodle, etc.)

•

Simulation

•

Educational Videos (Instructor-Produced, ICE, YouTube, etc.

•

Active & Collaborative Learning

•

Providing Access to Current, Best-Level Evidence

DISCUSSION

Recommendations for Future Faculty

- ❖

OT practitioners must understand the unique academic workplace duties

•

To meet these responsibilities, future faculty must nurture their creativity, flexibility, curiosity, problem-solving and time-management skills.
- ❖

Institutions should encourage OT faculty to work part-time or PRN in the clinical setting

•

Stay knowledgeable of Current Rehabilitation Practice Trends

•

Inform teaching strategies with inimitable clinical experience

- ❖

Promote Formal and Informal Faculty Mentorship

- Institutions should incentivize experienced faculty members to become mentors

•

New faculty should shadow other faculty and interprofessional colleagues to enhance academic and research skillset

Recommendations for Future Research

- ❖

Focus on the trends, pedagogies, and concerns highlighted by this study's respondents to develop comprehensive strategies to improve OT education efficacy.

Implications for the OT Profession

- ❖

Efficacy of OT practitioners is requires the presence of effective OT faculty to guide learning, so:

•

OT Academia must be represented as a viable and meaningful career choice

•

Professional development and clinical utilization of pedagogical and research skill must be emphasize by current and incoming clinical practitioners.

Limitations

- ❖

Limitations of this study include short time for survey administration, data collection and data analysis.

Key Findings

- ❖

Contemporary faculty issues call for:

•

Aggressive solutions implemented via interpersonal and institutional collaboration

•

Further Research to discover and evaluate these solutions

CONCLUSION

This Study

- ❖

Provided working OT faculty members with survey and interview-based mediums to express concerns and delineate the faculty perspective.

- ❖

Emphasized key issues with repercussive implications for the future quality of OT education:

- Overabundant Job Responsibilities VS. Time Constraints

- Faculty Teaching Credit Loads VS. Faculty Classroom Performance

- Myriad of Student Learning Styles VS. Limited Classroom Time

- A Paucity of Qualified Educators Available VS. Burgeoning OT Programs

- Student Unprofessionalism VS. Perfectionistic Student Neuroses

- ❖

Underscored the need for future research in order to determine the most effective methods of combatting these identified academic issues.

LITERATURE REVIEW

- ❖

Falzarano and Zipp (2012) and LaGrossa (2009) noted that faculty recruitment was difficult due to entry-level masters programs seeking OT faculty candidates with doctoral degrees.
- ❖

Paul, Stein, Ottenbacher, and Yuanlong (2002) reported that the mentoring-experience lead to improved research skills, pedagogical aptitude, and more fluid acclimations into academia.

PROCEDURE

1. Survey

- ❖

Participants completed survey consisting of open- and closed-ended questions

- ❖

Quantitative and qualitative data from the survey were consolidated into a Microsoft Excel document for tem-by-item content analysis.

2. Interview

- ❖

8 of the survey participants additionally partook in follow-up telephone interviews, conducted by the student researchers.

- ❖

Interview data were consolidated into Microsoft Excel document for item-by-item content analysis

PARTICIPANTS

- ❖

1261 OT faculty e-mail addresses were gathered from 128 OT schools, across the nation.
- ❖

All 1,261 OT faculty members were invited to participate in the survey.
- ❖

318 responded.
- ❖

317 met inclusion criteria for Survey.
- ❖

8 of these participants completed follow-up interviews.

REFERENCES

- Falzarano, M., & Zipp, G. P. (2012). Perceptions of mentoring of full-time occupational therapy faculty in the United States. *Occupational Therapy International*, 19(3), 117-126.doi:10.1002/oti.1326
- Paul, S., Stein, F., Ottenbacher, K. J., & Yuanlong, L. (2002). The role of mentoring on research productivity among occupational therapy faculty. *Occupational Therapy International*, 9(1), 24. doi: 10.1002/oti.154

Movement to Learn: Increasing Physical Activity in the Classroom



Carla Flynn OTD, OTR/L
MISERICORDIA
UNIVERSITY



Introduction

- A decline in physical activity in our nation's children has been on the rise. As age increases, the less likely school children are to participate in the recommended 60 minutes of physical activity per day (CDC, 2013).
- Increasing school and behavioral concerns are associated with sedentary and unhealthy lifestyle choices (Shi, Tubb, Fingers, Chen, Caffrey, 2013).
- Pressures arising from No Child Left Behind and the Common Core State Standards may be influencing schools to cut physical education and recess the curriculums resulting in more time engaged in sedentary learning.
- While evidence supports the need for children to have physical activity and exercise and to be active and engaged in the classroom, it seems that less time is spent on providing these essential resources to our school children.
- Research promotes movement in school and in the classroom as a means to improve academics, versus static interaction with the learning environment (CDC, 2010). An increase in functional performance with regard to time on task behavior, math and reading scores has shown to be positively influenced by physical activity within the school aged population (Mullender-Winjsma, Hartman, Greeff, Bosker, Doolaard, Visscher, 2015).
- Since children spend a majority of their time in school, the promotion of health, wellness and successful engagement in childhood occupation becomes an essential role of the occupational therapist.

Advocating for School Based Physical Activity

- On average, children spend about 7 hours per day in school. In some schools physical education classes and recess are mandated, but in other schools they are not.
- Children who participate in physical activity are less likely to be obese (Hong, Coker-Bolt, Anderson, Lee, Velozo, 2016).
- Children who are overweight are more likely to experience motor and cognitive delays (Wang, Chan, Ren, & Yan, 2016), which can adversely affect school function.
- Physical activity can support RtI practices for students with needs.
- Physical activity can address multiple objectives of improved physical fitness positive health behaviors and mental development (Tomprowski, Lambourne & Okumura, 2011) .
- Positive outcomes from preschool to 5th grade for physical activity levels, learning and achievement have been identified (Bailey & DiPerna, 2015; Fedewa, Ahn, Erwin & Davis, 2015; Mavilidi, Okely, Chandler & Paas, 2016).
- High intensity, short bursts of physical activity have elicited positive outcomes on academic achievement and on task behavior in certain age groups (Fedewa, Ahn, Erwin & Davis, 2015; Ma, Le Mare & Gurd, 2014) .

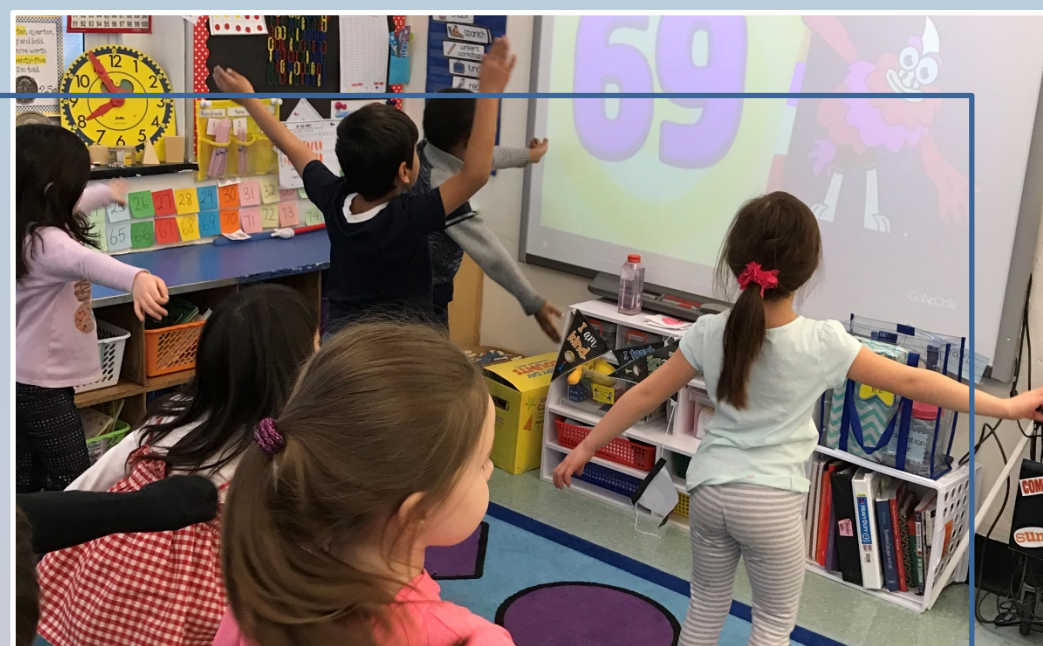
Role of the Occupational Therapist



Movement Break



Movement Room



Movement in Math

With most of the available data supporting the need for physical activity to stimulate our children and promote overall health and well being, many school districts, administrators and teachers seem to struggle with how to incorporate physical activity into typically occurring school routines. In the face of the changes in our nation's educational system and the rising rate of obesity in our nation's children, once again occupational therapy is forced to reexamine its therapeutic conventions. Just as Marshall, Myers and Pierce recognized in their 2017 article, occupational therapists have demonstrated mastery for many decades, adapting their own skills, the environment and use of physical materials in the context of client needs and the changing times. This is necessary to promote engagement in occupation and for disease prevention, which align with the profession's vision of health promotion for the 21st century. Occupational therapists in the school setting are no exception. The OT's role becomes influential in examining the environment, developing and adapting school and classroom based movement programs that suit the needs of the population. Specific roles that the occupational therapist assumes in the school setting are listed below:

- **Identification of relevant research and evidence based methodologies to support/negate school/classroom based movement programs**
- **Identification of different types of school based movement programs and their efficacy**
- **Develop an understanding of daily classroom routines/needs**
- **Teacher collaboration - understanding perceptions for integrating movement into the classroom**
- **Evaluation of physical environment**
- **Establishment daily routines for teachers**
- **Collaboration is key**

- **Identification of stakeholders including students, teachers, staff & administrators**
- **Surveys for stakeholders**
- **Community outreach**
- **Grant writing**
- **Teacher/Administrator education and training**
- **Parent/student education**
- **Program development**
- **Overseeing of programs**
- **Data collection of program success**
- **Development of satisfaction surveys for students, teachers, administrators and stakeholders**

Benefits of Classroom Based Movement

Numerous advantages have been identified with school and classroom based movement programs with regard to physiological outcomes and academic success.

- Teachers reported ease of implementation of in class movement programs without adverse affects to instructional time (Bailey & DiPerna, 2015)
- Improved math and reading achievement (Mullender-Wunsma, Hartman, Greeff, Bosker, Doolaard and Visscher, 2014)
- Increase in student's physical activity levels (Bailey & DiPerna, 2015)
- Improved psychological health specifically for girls (Bunketorp Käll, Malmgren, Olsson, Lindén, Nilsson)
- Ball chairs were beneficial for children who displayed high levels of inattention and hyperactivity (Fedewa & Erwin, 2011)
- Evidence of immediate and delayed retention of information and enjoyment of classroom lessons (Mavilidi, Okely, Chandler & Paas, 2016)
- Improvement in off task behavior especially in children who demonstrate higher intensities of this behavior (Ma, Le Mare & Gurd, 2014)
- Can enhance executive functioning (Tomprowski, Lambourne & Okumura, 2011)

References

- Bailey, C. G. & Diperna, J.C. (2015). Effects of classroom-based energizers on primary grade students' physical activity levels. *The Physical Educator*, 72, 480-495.
- Bunketorp Käll, L., Malmgren, H., Olsson, E., Lindén, T., & Nilsson, M. (2015). Effects of a curricular physical activity intervention on children's school performance, wellness, and brain development. *Journal Of School Health*, 85(10), 704-713.
- CDC(2010). *The association between school based physical activity, including physical education, and academic performance*. Atlanta, GA: US Department of Health and Human Services.
- CDC (2013). Youth risk behavior surveillance-United States, 2013. *Morbidity and Mortality Weekly Report*, (63)4.
- Fedewa, A., & Erwin, H. (2011). Stability balls and students with attention and hyperactivity concerns: Implications for on-task and in-seat behavior. *AJOT*, 65(4), 393-399.
- Fedewa, A., Ahn, S., Erwin, H., & Davis, M. (2015). A randomized controlled design investigating the effects of classroom-based physical activity on children's fluid intelligence and achievement. *School Psychology International*, 36(2), 135-153.
- Ma, J., Mare, L., & Gurd, B. (2014). Classroom-based high-intensity interval activity improves off-task behaviour in primary school students. *Applied Physiology, Nutrition, And Metabolism*, 39(12), 1332-1337.
- Marshall, A., Myers, C., & Pierce, D. (2017). Centennial Topics - A century of therapeutic use of the physical environment. *AJOT*, 71(1).
- Mavilidi, M., Okely, A., Chandler, P., & Paas, F. (2016). Infusing physical activities into the classroom: Effects on preschool children's geography learning. *Mind, Brain, And Education*, 10(4), 256-263.
- Mullender-Wijnsma, M., Hartman, E., de Greeff, J., Doolaard, S., Bosker, R., & Visscher, C. (2016). Physically active math and language lessons improve academic achievement: A cluster randomized controlled trial. *Pediatrics*, 137(3).
- Shi X, Tubb L, Fingers ST, Chen S, Caffrey JL. (2013). Associations of physical activity and dietary behaviors with children's health and academic problems. *Journal of School Health*, 83(1), 1-7.
- Tomprowski, P., Lambourne, K., & Okumura, M. (2011). Physical activity interventions and children's mental function: An introduction and overview. *Preventive Medicine*, 52, S3-S9.
- Wang, C., Chan, J., Ren, L., & Yan, J. (2016). Obesity reduces cognitive and motor functions across the lifespan. *Neural Plasticity*, 2016, 1-13.



An Agricultural and Horticultural Transition Vocational Program for Adolescents with Special Needs

Jennifer Dessoie, OTD; Alyssa Auer, OTS; Fallon Cooper, OTS; Meghan DiGerolamo, OTS; Quinn Fohlinger, OTS; Allison Hausman, OTS; Erin Huff, OTS

MISERICORDIA UNIVERSITY OCCUPATIONAL THERAPY DEPARTMENT, DALLAS PENNSYLVANIA



LITERATURE REVIEW

Transitional/Vocational Services:
•The transition process should enable young adults to successfully enter the workforce, however, there is “a disproportionate percentage of [students who] leave high school and neither work nor continue their education despite the majority having transition goals to the contrary”.
•Based on the data collected, basic skills such as work completion, task accuracy, punctuality, social skills, and self-regulation were not being improved upon or addressed, preventing successful transition.
•Studies acknowledge that current theory and practice may not yield acquisition of transitional vocational planning, training, and subsequent employment and questions the adequacy of the current planning and implementation of transitional programs to reach employment.

Impact of Agricultural/Horticulture:
•The effects of social & therapeutic horticulture on vulnerable groups showed an increase in social participation/communication skills, which aid in the development of job skills.

Animal Assisted Therapy:
•Proven to be beneficial to social attention, social behavior, interpersonal interactions, mood, heart rate/blood pressure -“reduces the feelings of anxiety, provides safety, comfort & promotes growth in displays of affection.”

PARTICIPANTS

•7 high school students with special needs ages 16-21, enrolled in DGFP prior to study

INSTRUMENTS

Quantitative: ACL, TFLS, Beery VMI
Qualitative: Recorded Interviews



PROCEDURES

- Participants active in DGFP during study.
- DGFP students participate in different activities throughout the program, depending on the season including tending to farm animals, planting and harvesting crops, completing general maintenance and alternative revenue tasks in the off-season.
- months, i.e. making wreaths in the winter.
- Qualitative assessment instruments were administered over three data collection points: October 2015, February and May 2016.
- Quantitative data was also collected over three data collection points in the form of recorded interview.

INTERVIEW COMMENTS

Client 4: “This isn’t like a job for me, it’s more like people say that, if you love what you work, it’s not work. That’s how it is with this.”

Client 1: “[The program] was a learning experience for kids with disabilities like myself and all the other kids here. So, it’s a **great learning experience** for anyone that comes here.”

Client 2: “I just like nature... **I like being outside** nature, it gives me something to do. Planting and being up here... **I’m moving around**, I am basically like learning how to grow different types of plants. **So every single time... it’s like a new learning experience... you learn something new every day.**”

“This program right here is good because it gets you started, where if you want to start like a farm or a business of your own... and if you were going to go out and work for a farmer. So, **you actually know the ropes of basically what you have to do there to get there.**”

“High school is a rough place... you got people who basically don't like you... Coming up here you know, **I made more friends up here than I did back in high school.**”

Client 3: “**You learn more here. You get hands-on experience.**”

“Here they kind of **teach you how to stay on the path... the same path the path that you want to be on, the path that you chose.**”

Client 8: “**Work hard, you know, and have fun at the same time.**”



QUALITATIVE RESULTS

- | Process Themes: | Outcome Themes: |
|---|--|
| Learning Experience <ul style="list-style-type: none">-Non-Traditional-Skill Transfer | Pre-Vocational Skills <ul style="list-style-type: none">-Vocational Planning |
| Motivation <ul style="list-style-type: none">-Intrinsic Motivation-Favorites-Monetary Gain | Acquiring Social Skills <ul style="list-style-type: none">-Building Relationships-Learning |
| | Discipline/Respect |

Quantitative results were insignificant.



DISCUSSION & CONCLUSION

Analysis of the interviews discovered themes that confirmed the program's ability to build relevant, transferrable skills, pre-vocational skills, self-efficacy and encouraging self-determination. The benefits of a paid work experience were noted by four out of seven clients during the interviews.

Future research: Placement of the participants following engagement in the DGFP and specific factors that facilitate or hinder success of DGFP participants.

Conclusion: Qualitative data derived themes of significance in determining the efficacy of the program.

ACKNOWLEDGEMENTS: Misericordia University, Hillside Farms, LIU-18, Dream Green Farm Employees and Mentors, Dr. Joseph Cipriani

REFERENCES AVAILABLE UPON REQUEST



The Effectiveness of iPad Handwriting Applications on Improving Visual Motor and Handwriting Skills in Children with Autistic Spectrum Disorder

Jennifer Dessoye, OTD, OTR/L; Lindsey McLaughlin OTD, OTR/L, Chelsey Korhonen MS OTR/L, Shannon McSweeney MS OTR/L, Cathryn Steinhoff MS OTR/L
MISERICORDIA UNIVERSITY OCCUPATIONAL THERAPY DEPARTMENT, DALLAS PENNSYLVANIA



PURPOSE

The purpose of this study is to explore the effectiveness of iPad handwriting applications in improving the visual motor and handwriting skills of children with ASD.

LITERATURE REVIEW

- *The worldwide prevalence of autism spectrum disorders is 62/10000 (Elsabagh, 2012)
- *Children with autism often lack the foundational skills for handwriting development (Kushki, 2011)
- *These children typically display motor deficits and grasp difficulties significantly impacting their handwriting skills (David, 2009)
- *Evidence regarding the origin of these problems is lacking

INSTRUMENTS

- *The Beery-Buktenica Test of Visual-Motor Integration (Beery VMI)
- *Test of Handwriting Skills Revised (THS-R)

PARTICIPANTS

11 Children in a large suburban school district in Pennsylvania, educationally diagnosed with ASD in a specialized autism classroom.
*6 to 8 years of age, 5 boys and 4 girls
*Delayed in visual motor and handwriting skills as stated by a goal in their IEP

PROCEDURES

12 week structured program on the iPad mini carried out daily for 10-12 minutes.
Participants received the typical handwriting curriculum along with the iPad application intervention.

2 minutes – Visual motor app
6 minutes – *Ready to Print*
2-4 minutes – Visual motor app



RESULTS

Significance: Alpha level of .05

THS-R did not yield any statistically significant results

VMI Raw Scores	VMI Age Equivalent
P values from the Wilcoxon signed-rank test= .0449 P value for the paired t-test= .0270 Post scores significantly higher than the pre raw scores.	p value for the paired t-test =.0470 Post scores significantly higher

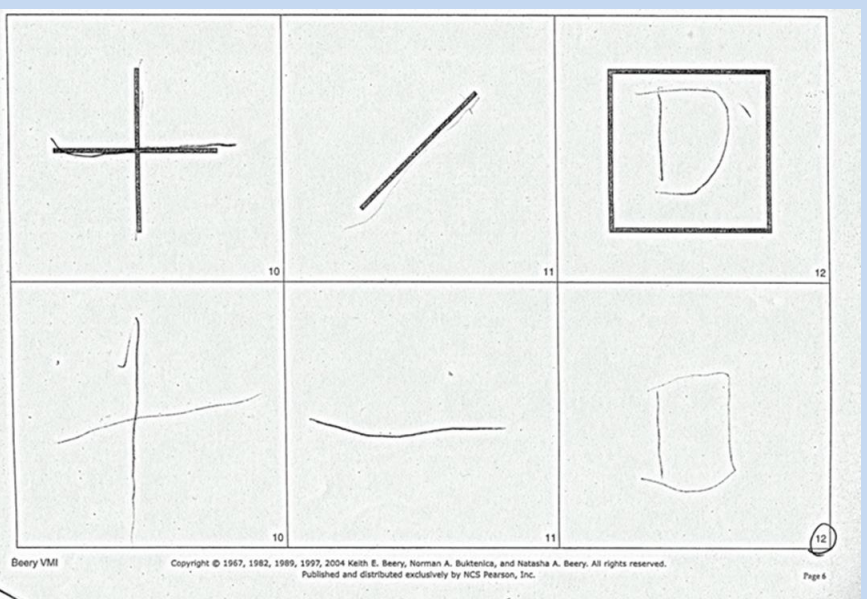
Hypothesis 1

Children with ASD will show significant improvements in their visual motor skills as determined by the Beery VMI after a structured twelve week program using the iPad mini with specific handwriting applications

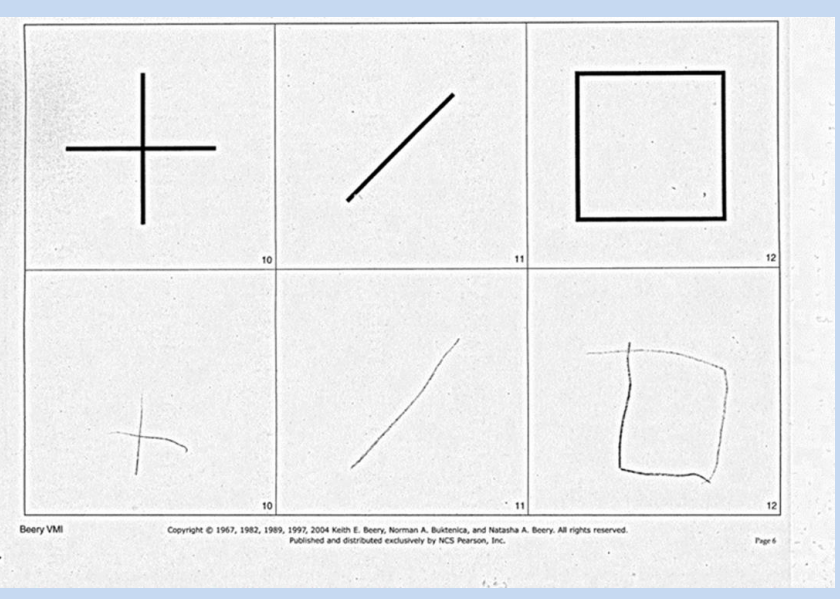
3 of 9 children had higher THS-R scores post intervention

Scores	Wilcoxon	Paired t-test
Raw Scores	.0449	.0270
Standard Scores	.1172	---
Scaled Scores	0.2657	0.2152
Age Equivalents	0.06445	.0470

Pre-Test



Post-Test



Hypothesis 2

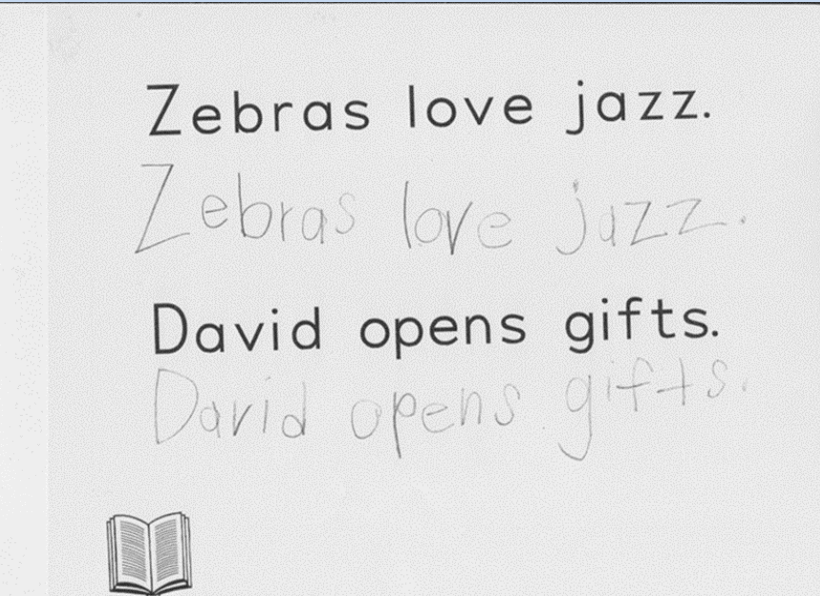
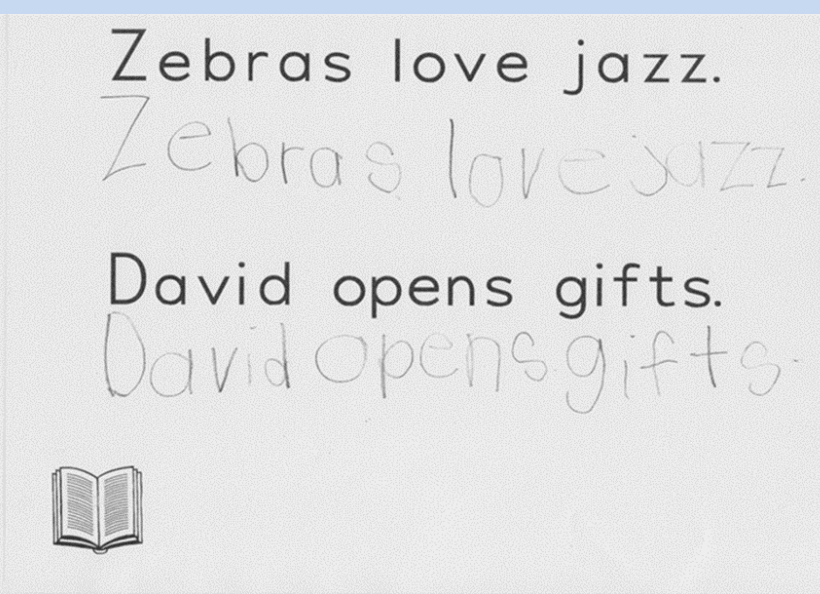
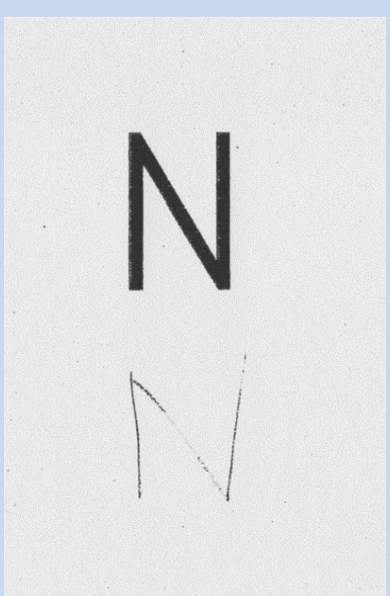
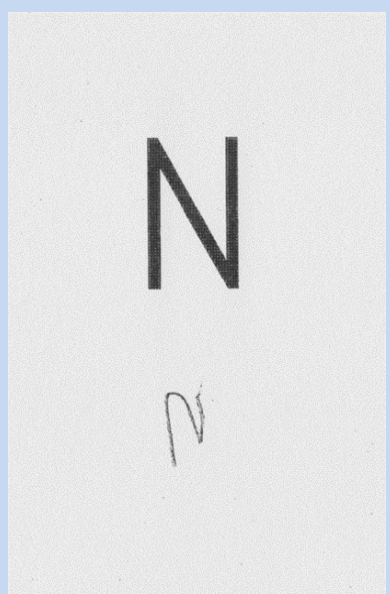
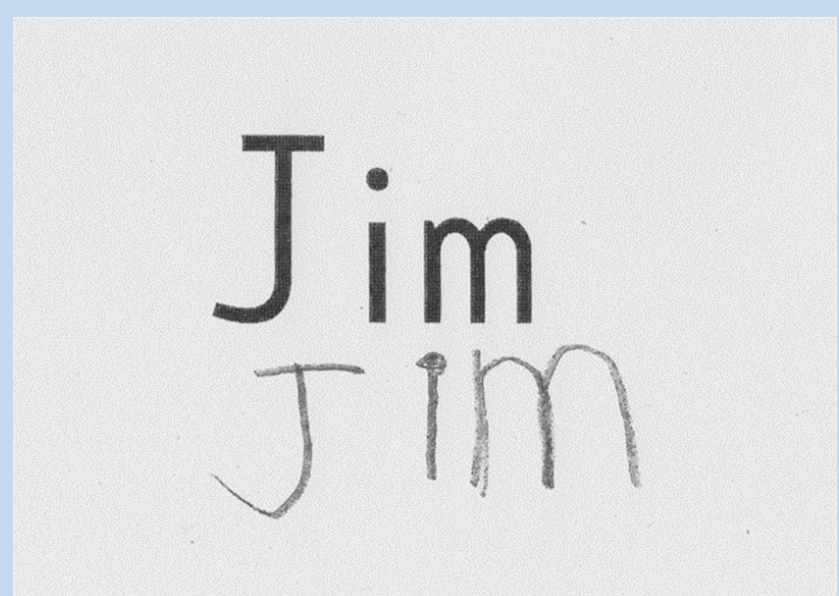
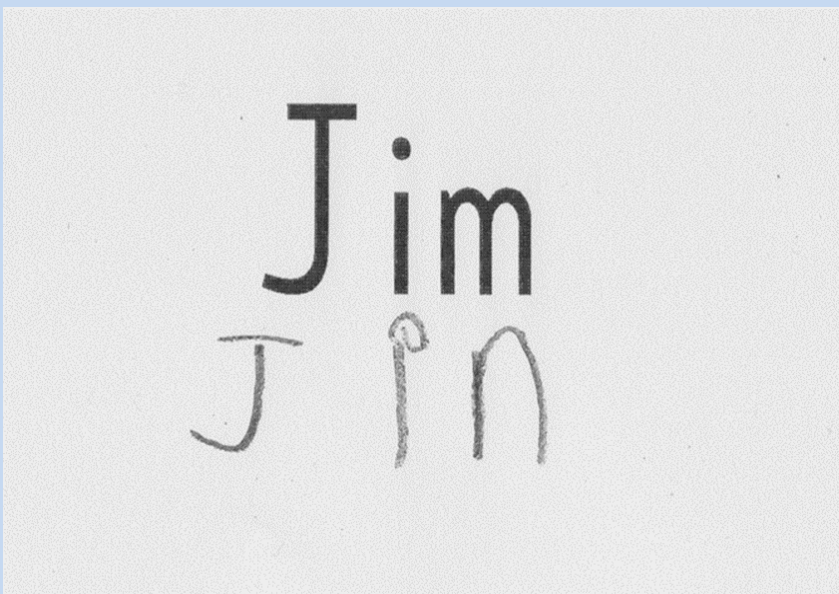
Children with ASD will show significant improvements in handwriting skills as determined by the THS-R after a structured twelve week program using the iPad mini with specific visual motor apps

Scores	Wilcoxon
Scaled Scores	0.34375
Standard Scores	0.34375
Percentile Ranks	0.1875

6 of 9 children had higher VMI scores post intervention

PRE TEST

POST TEST



CONCLUSION

- *iPad as effective intervention - Generalization of targeted skills
- *THS-R as a tool for children with special needs is not a suitable tool for this population
- *Motivation for iPad use
- *Continued Research

REFERENCES &

ACKNOWLEDGEMENTS

Available upon request
Ellen McLaughlin EdD, OTR/L; David Nossavage; Funding provided by: Misericordia University's Research Grant Programs

MISERICORDIA UNIVERSITY



Breaking Barriers and Borders: A Justification for Internationally-Based Service Clubs

Mariah Thomas, OTS
Ellen McLaughlin, EdD, OTR/L
Jennifer Snyder, OTS
Allison Alexander, OTS
Jenna Aimes, OTS



Occupational Therapy International Club

Dedicated to increasing knowledge and understanding of occupational therapy in diverse cultures and countries. OTI's mission is to promote awareness of occupational experiences of individuals and populations within various cultures living and/or working in international settings, with an emphasis on those in developing countries.

OTI is a voluntary educational and service based club at Misericordia University.

Club Activities Supporting International Service



Mutual Benefits of Working With a Diverse ESL Population

Program Proposal

- Implement a series of programs at a local elementary school in an English as a Second Language (ESL) classroom

Goal

- Maximize well-being and participation for elementary school students through programs that promote healthy lifestyles and alter maladaptive routines

About Our Program

- Designed by club officers
- Incorporated developmentally appropriate activities for students
- Activity-based with reflection
- Integrated concepts from occupational therapy courses

Goodbye Germs

Population: 1st through 3rd grade ESL students
Topic: Healthy Habits
Session time: 45-minutes

Purpose: To promote healthier lifestyles by identifying kid-friendly daily behaviors. Educate students about germs. Teach proper hand washing techniques and coughing and sneezing etiquette.

Description: Interactive group activity involved children in simulating hand washing tasks; incorporated songs, Simon says, and a creative demonstration of the spreading of germs. Finally, we asked the students in the group to each state what they learned during the program.

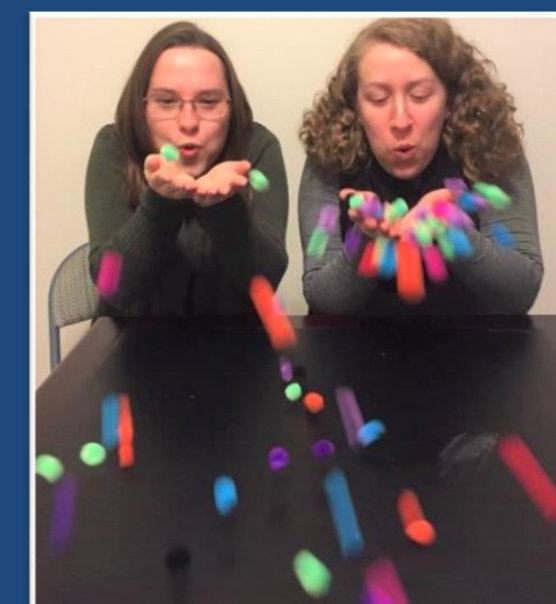


Be A Buddy Not A Bully

Population: 1st through 3rd grade ESL students
Topic: Bully prevention
Session time: 45-minutes

Purpose: Facilitate group activity in which students identify the differences between being a bully and being a friend. Encourage students to describe strategies to prevent bullying and to be a friend.

Description: Interactive discussion about what a bully is; how being bullied may feel; and how to prevent bullying. Engage in ball toss activity in which students choose a situation described on the ball and identify if the action describes a buddy or a bully. Each student creatively expressed their definition of a buddy on pieces of paper that were ultimately linked together to create a "friendship chain" to be kept in the classroom.



Snack Attack

Population: 1st through 3rd grade ESL students
Topic: After School Routines and Healthy Snacks
Session time: 45-minutes

Purpose: Increase children's awareness of healthy ways to structure their time after school to promote occupational balance.

Description: Introductory animal charades activity engaged the students and was followed by a group discussion on after school routines. Students shared activities that they engage in at home, such as making snacks, doing homework, or playing games. Educated students about fun "brain breaks" such as exercising and facilitated a yoga sequence that incorporated various animal poses for students to practice in between their homework time. Occupational therapy students discussed what makes an after school snack healthy and unhealthy, and then gave students a plate to draw the different types of food they would eat when they went home (i.e. bananas, apples, cheerios, yogurt, peanut butter, nuts). Each student shared with the class what they drew on their plates.

Reflections

- Volunteer experiences helped to develop therapeutic use of self
- Increased awareness of the impact of language barriers on occupational engagement
- Promoted club members' ability to facilitate group programs

Benefits to OT Students

- Encouraged *initiative* to develop programs that address a target populations needs with the scope of occupational therapy practice
- Supported *advocacy* for awareness of cultural diversity and its impact on community members
- Community building* experiences in which individuals communicate to learn about ways to promote their health and well-being

Programming for the Future

- Refine needs assessment process
- Consider implementation of multi-session programs
- Increase club member involvement in designing programs
- Create programs for ESL students to develop social interaction skills

MISERICORDIA UNIVERSITY

Facilitating Leadership and Advancement Through the Post Professional OTD Capstone Experience

Ellen McLaughlin, Ed D, OTR/L
Lori Charney, OTD, OTR/L
Dawn Evans, OTD, OTR/L
Misericordia University

Shifra Leiser, OTD, OTR/L
Touro College



Lori Charney, OTD, OTR/L

Development of a Sensory Social Treatment Group for Children with ASD

Capstone Objectives

Conduct comprehensive program development
Provide OT Level I psychosocial fieldwork experiences
Complete research project and disseminate results

Outcomes

- ❖ Enhanced research skills and provision of EB interventions, which have been replicated in other projects and studies
- ❖ Gained knowledge of fieldwork standards and relationship to curricular design
- ❖ Increased ability to guide students' application of theory to practice
- ❖ Developed leadership skills on a university level, resulting in development of an OT clinic.
- ❖ Continued advocacy in the community (Autism Advisory Board member)
- ❖ Attained a full time faculty position
- ❖ Gained confidence and content to present at national (AOTA) and international (COTEC-ENOTHE) levels

Stress and Function in Children with Special Needs: To Advance Knowledge & Intervention Skills of Therapists & Families

Capstone Objectives

To create educational events for providers and caregivers of children with special needs
Expand knowledge and awareness of the impact of stress upon function, improve quality of life, improve attunement and relationship, as well as exposing and amplifying competency in children with special needs.

Outcomes From the Experience

- ❖ Updated skill set for using technology to access research and to stay current with trends of service and treatment.
- ❖ Reflect upon & connect pearls of clinical wisdom from over 15 years of practice to foundational models & theories
- ❖ Make meaningful relationships with experienced faculty in the field of OT to facilitate my own interests
- ❖ Create a project that allowed me to share my passion- the HANDLE© Approach and in particular Gentle Enhancement with families
- ❖ Alter my entire career trajectory from the clinic to academia at Touro College by giving me the skills and confidence to inspire the next generation of OT professionals; (including presenting a short-course on Gentle Enhancement at the 2016 AOTA conference) As an academician, continue to research, lecture within the community and provide CEU events for therapists
- ❖ Collaborate interprofessionally in researching the efficacy of various neurological treatment modalities to harness neuroplasticity, build neural networks and ultimately improve function.
- ❖ Maintain a lifelong connection of support and camaraderie with professors and veterans in the field of OT, professors who guide, encourage and support the passions and strengths of each individual student.

Shifra Leiser, OTD, OTR/L

Professional Implications & Outcomes

Kimberly Kubistek, OTD, OTR/L
The Study of Primitive Reflex Evaluation and Integration.

"I gained advanced clinical knowledge and skills in neuro-motor-sensory processes, skills for presenting in the community and at conferences and a foundation for a new position as Director of Rehabilitation at Children's Hospital of Pittsburgh."

Jacqueline Barletta, OTD, OTR/L

Protocol development for screening of post stroke depression in inpatient rehabilitation settings.

"This project not only facilitated more knowledge, expertise, and confidence for myself, but contributed to a meaningful educational experience for my colleagues."

Other Outcomes

**Development of a Private Practice
Securing a Book Contract**

**Hand & Geriatric Care Management Certification
Building a School Based Interprofessional
Horticultural Center**

**International Pediatric Consultation Programs
Conducting Qualitative and Single Subject Research**

Occupational Therapy Post Professional Education meets the needs of practitioners while addressing the promise of Vision 2025

Step It Up Teen Health & Wellness Program

Capstone Objectives

Provide adolescents the opportunity to develop healthy living strategies by engaging in self-help activities in a group setting
Provide parents and family member's educational opportunities to learn health living strategies to assist with carryover in adolescent programming

Outcomes

- ❖ Successfully designed and implemented program on a small budget
- ❖ Program provided teen and parent dual group sessions
- ❖ Psychosocial component made program unique
- ❖ Use of social media as a marketing tool increased teen and parental participation
- ❖ Designed and incorporated OT students in programming and created potential fieldwork opportunity
- ❖ Designed evidence based programming to target demographic
- ❖ Disseminated program information at national (AOTA) and state (POTA) conferences

Dawn Evans, OTD, OTR/L





Examining the Impact of Calming Music on the Stress Responses of Persons with Dementia

Trevor Bodnar, OTS, Alexandra Elmes, OTS, Nicole Petti, OTS, Kaitlyn Sledzinski, OTS , Lauren Zack, OTD, OTR/L, Ellen McLaughlin, Ed.D., OTR/L



Background & Significance

- Over 46.8 million people worldwide have a diagnosis of dementia, and currently there is no cure (Steiner et. al., 2017).
- Anxiety is common in dementia, with prevalence rates varying from 38% in Alzheimer's disease to as high as 72% in vascular dementia (Snow et. al., 2012).
- It has been shown that individuals with dementia have behavioral, cognitive and physiological changes. Music has been proven to be effective in reducing these symptoms and normalizing physiological outcomes (Pauwels et al, 2014, p 408)
- Current research shows that music has consistent positive effects on reducing anxiety as measured by physiological outcomes, including heart rate, breathing rate, and blood pressure, in patients with dementia (Vasionyte & Madison, 2013, pg. 1209).
- A link has been made between music and an individual's emotions (Pauwels, et. Al., 2014, p.404). Music was identified as one of the most meaningful activities among care home residents with dementia (McDermott et al., 2014, p 710).

RESEARCH DESIGN. Single subject with a baseline mean and intervention phase.

HYPOTHESIS. A fifteen minute period of calming music will reduce anxiety as evidenced by decreased blood pressure, heart rate, galvanic skin response and scores on the Behavior Rating Scale, with increased measures of oxidation.

PARTICIPANTS. Five females, age 87-96, average age of 90.8, with a diagnosis of either Alzheimer's Disease or Dementia.

TEST MEASURES. The Behavior Rating Scale, pulse oximeter, blood pressure and heart rate cuff and a galvanic skin response device.

PROCEDURES: Individuals were seated comfortably in a chair in their own bedroom to ensure a low stimulus environment in the nursing unit. The researcher introduced 15 minutes of calming music and encouraged quiet relaxation. The intervention music was Mozart Sonata K.448

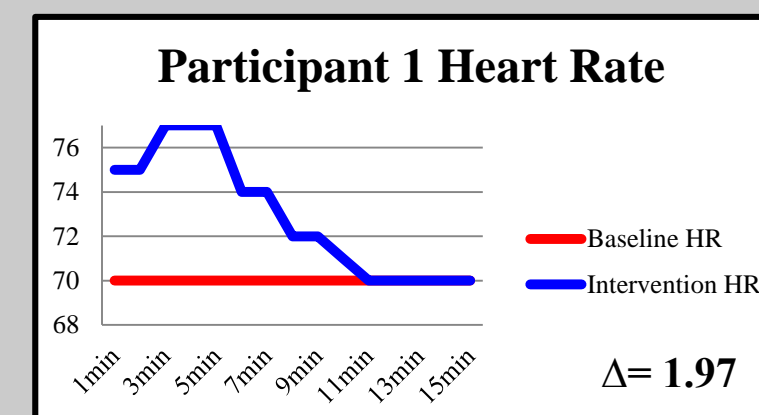
Results and Analysis

Individual results for each participant are depicted in graphs and are individually reported based on visual analysis of heart rate and systolic blood pressure graphs. The Delta (Δ) statistic was used as a measure of effect size and is reported on each graph. We used the following values to measure effect size. (Parker & Vannest, as cited in Bloom, Fisher, and Orme, 2009).

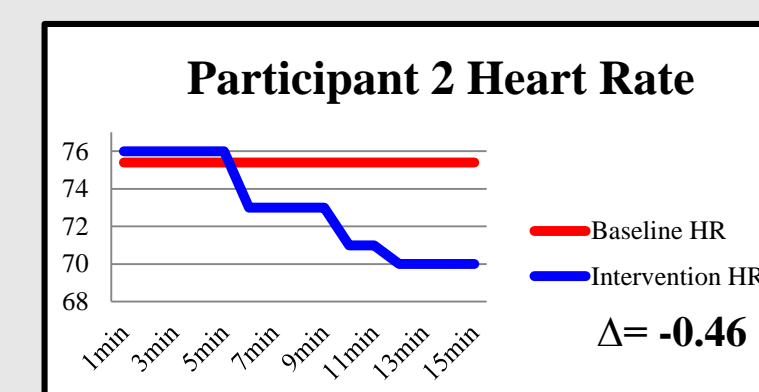
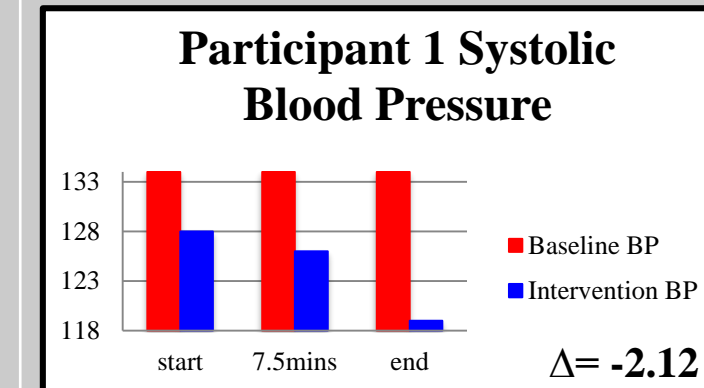
Small effect size: <0.87

Medium effect size: $0.87-2.67$

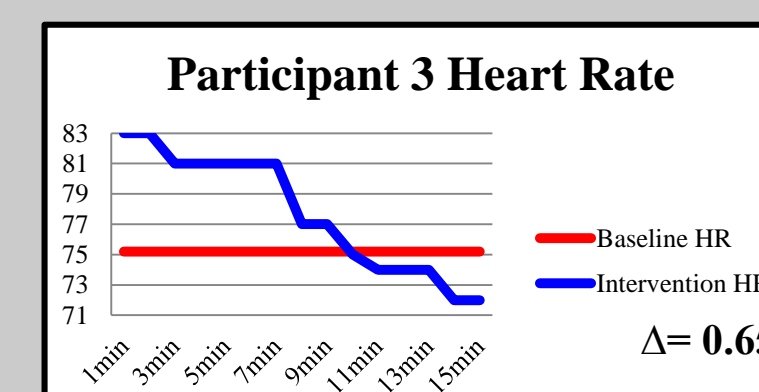
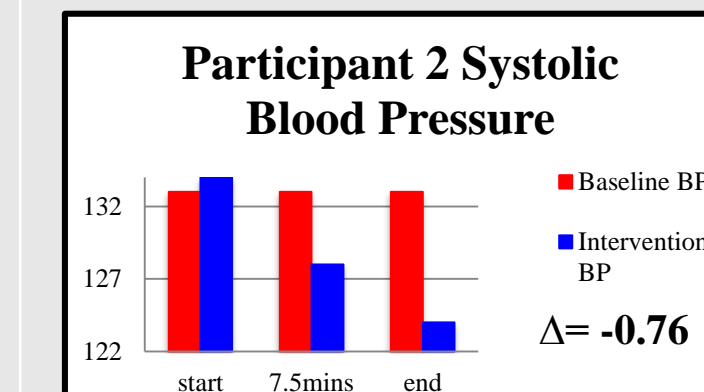
Large effect size: >2.67



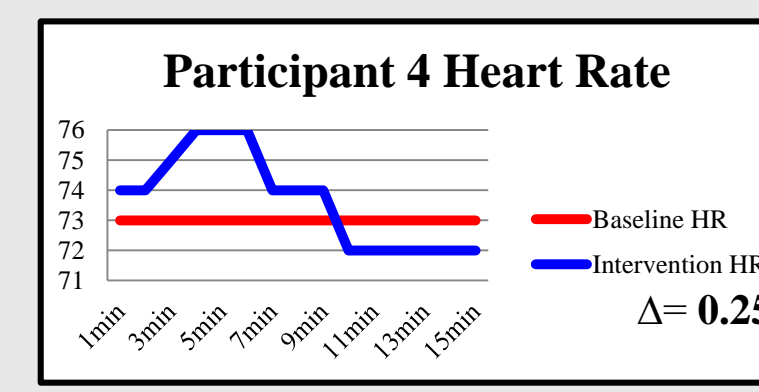
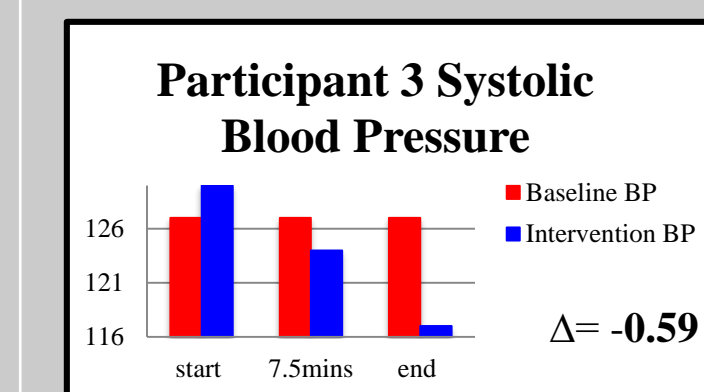
Based on visual analysis, there was no effect noted on heart rate, in fact it increased. Systolic blood pressure decreased progressively from the average (75.4) to a low of 70 during intervention. On the Behavior Rating Scale minimal decreases were noted in motor agitation and resisting care.



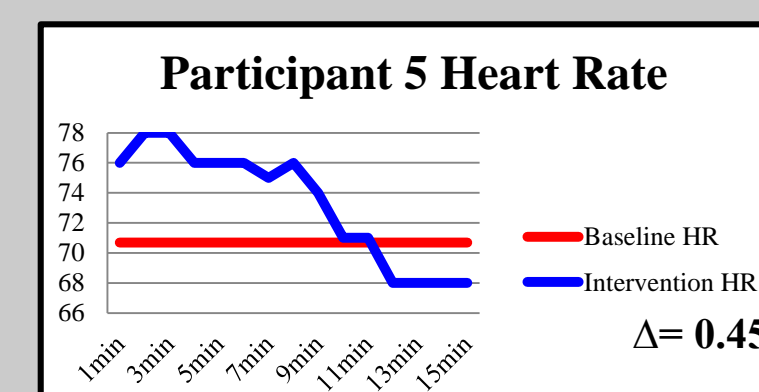
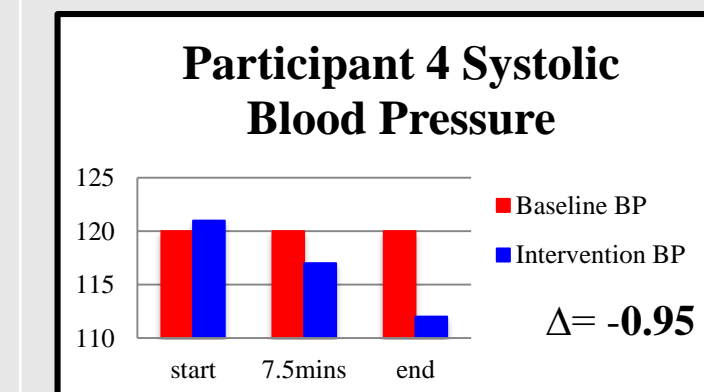
Based on visual analysis, mean heart rate preceding intervention was highly variable, and during the intervention phase progressively decreased from approximately 76-70. While systolic blood pressure was higher than the baseline when the music was initiated, it then progressively decreased from 134 to a low of 124. On the Behavior Rating Scale there were minimal decrease in motor agitation, aberrant vocalizations and resisting care and moderate decrease in aggressiveness.



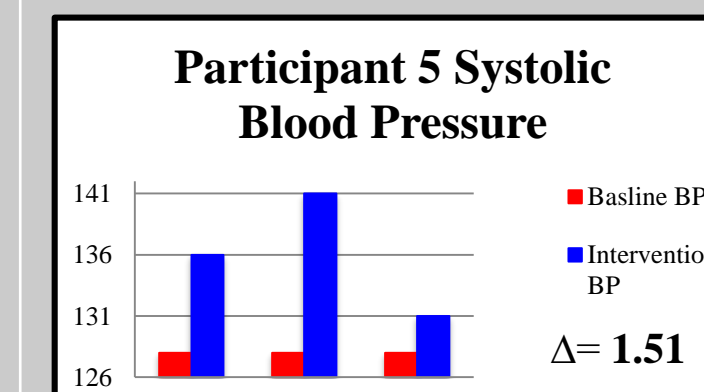
Based on visual analysis, mean heart rate pre-intervention was 75.2 and during intervention decreased progressively from 83-72. Participant 3's pre-intervention mean systolic blood pressure was 127, and during intervention began at 130, dropping to 117 by the end of the 15 minutes. On the Behavior Rating Scale minimal decreases were noted in resisting care.



Based on visual analysis, mean heart rate pre-intervention was 73, and had an overall decrease during intervention from 74-72. Pre-intervention mean systolic blood pressure was 120, while dropping from 121 to 112 throughout intervention. On the Behavior Rating Scale there was minimal decreases noted in aberrant vocalization, motor agitation, and moderate decreases noted in resisting care.



Based on visual analysis, mean heart rate pre-intervention was 70.7, and had an overall decrease throughout intervention from 76-68. Pre-intervention mean systolic blood pressure was 128 and was highly variable throughout intervention, beginning at 136, increasing to 141 at 7.5 minutes and ending at 131. On the Behavior Rating Scale there was minimal decreases in motor agitation, and a minimal increase in resisting care.



Discussion

- Overall, there was a decrease in systolic blood pressure throughout intervention, however variable results noted in heart rate.
- Overall there was a decrease in aberrant vocalization, motor agitation, aggressiveness, and resisting care post intervention as per the Behavior Rating Scale.
- Limitations included failure of the ESense Galvanic Skin Response outcome measurement tool which was planned as the primary physiological measure, with blood pressure and heart rate as secondary physiological measures. In addition, the baseline measurements were collected over a period of days whereas the intervention measures were obtained within a 15 minute period. This altered method of obtaining baseline and intervention data does not have established credibility as a single subject design, but was chosen as the best measure for the situation.
- With further research, therapists could utilize multisensory stimulation as a nonpharmacological intervention to decrease anxiety and related behavioral disturbances.
- Further research is necessary to ensure validity of outcomes and effectiveness of musical intervention on physiological outcomes and anxiety.

REFERENCES. Steiner, G. Z., Mathersul, D. C., MacMillan, F., Camfield, D. A., Klupp, N. L., Seto, S. W., & ... Chang, D. H. (2017). A Systematic Review of Intervention Studies Examining Nutritional and Herbal Therapies for Mild Cognitive Impairment and Dementia Using Neuroimaging Methods: Study Characteristics and Intervention Efficacy. *Evidence-Based Complementary & Alternative Medicine (Ecam)*, 1-21.

Vasionyte, I., & Madison, G. (2013). Musical intervention for patients with dementia: A meta-analysis. *Journal of Clinical Nursing*, 22(9/10)L 1203-16.

ACKNOWLEDGEMENTS. We would like to extend a gracious thank you to the participants, caregivers, families, and College of Health Sciences and Education at Misericordia University for their assistance with this project.



The Effectiveness of a Multi-Sensory Center-Based Learning Curriculum in Pre- Kindergarten Students

Jennifer Dessoye, OTD, OTR/L; Leah Davis, OTS; Ellen Mahon, OTS; Samantha Rehrig, OTS; Tara Robinson, OTS

MISERICORDIA UNIVERSITY OCCUPATIONAL THERAPY DEPARTMENT, DALLAS PENNSYLVANIA



LITERATURE REVIEW

Research regarding how preschool programs affect early learning was found to be limited. The following areas were included in the literature review in order to form a full and complete understanding of multi-sensory center-based curriculum.

Standard Curriculum – Adherence with the National Association for the Education of Young Children (2014) and the adoption of the Common Core State Standards in 42 states is often taught in traditional settings. Traditional curriculums may prevent making the connections and generalizations that can be achieved through an engaging and interactive learning experience, such as multi-sensory center-based curriculum.

Community-Based – Several studies investigated the effect of community-based programs on child development. One community-based program study aimed to promote well-being and healthy child development, paralleling various goals of this study's community-based multi-sensory center-based learning curriculum (Worton, 2014).

Small Group Instruction – Waslik (2008) found that dividing students into small groups incorporates opportunities for social contact while allowing children “to express themselves, receive feedback from the teacher, and have the opportunity to respond to the feedback” (p. 519). Small groups are utilized throughout this study's curriculum.

Center-Based – activities provide the opportunity to explore the classroom (Wasik,2008). One study found “center-based childcare programs in the community may be beneficial for fostering school readiness” (Winsler, 2008, p 314). This study's multi-sensory center-based curriculum further explores this method.

HYPOTHESIS

The research team hypothesizes that the use of multi-sensory center-based curriculum in a pre-K classroom will improve each student's overall performance in the areas of: reading fluency, reading comprehension, visual skills, and fine motor skills.

PARTICIPANTS

12 typical PreK participants were assessed at an early learning academy in northeastern Pennsylvania. Children were enrolled in the school prior to the announcement of this study.

INSTRUMENTS

The Beery-Buktenica Developmental Test of Visual-Motor Integration (Beery VMI) including Visual Perception Subtest & Motor Coordination Subtest
Group Reading Assessment & Diagnostic Evaluation (GRADE)

PROCEDURES

Children received the multi-sensory center-based learning curriculum currently in place at the early learning academy.

- Educational centers were combined with gross motor, fine motor, visual motor, sensory motor, and visual perceptual learning experiences.
- The general learning curriculum remained intact.
- Each child attended the program between one to four days a week.

Assessment instruments were administered by a qualified professional in September 2014 and again in May 2015.

RESULTS

GRADE – Raw Score	.000
GRADE - Grade Equivalent	.009
VMI – Raw Score	.000
VMI- Grade Equivalent	.000
VMI – Visual Perception Subtest – Raw Score	.016
VMI – Visual Perception Subtest – Grade Equiv	.016
VMI – Motor Coordination Subtest – Raw Score	.001
VMI – Motor Coordination Subtest – Grade Equiv	.000
Key	
Significant Value	Not Significant Value

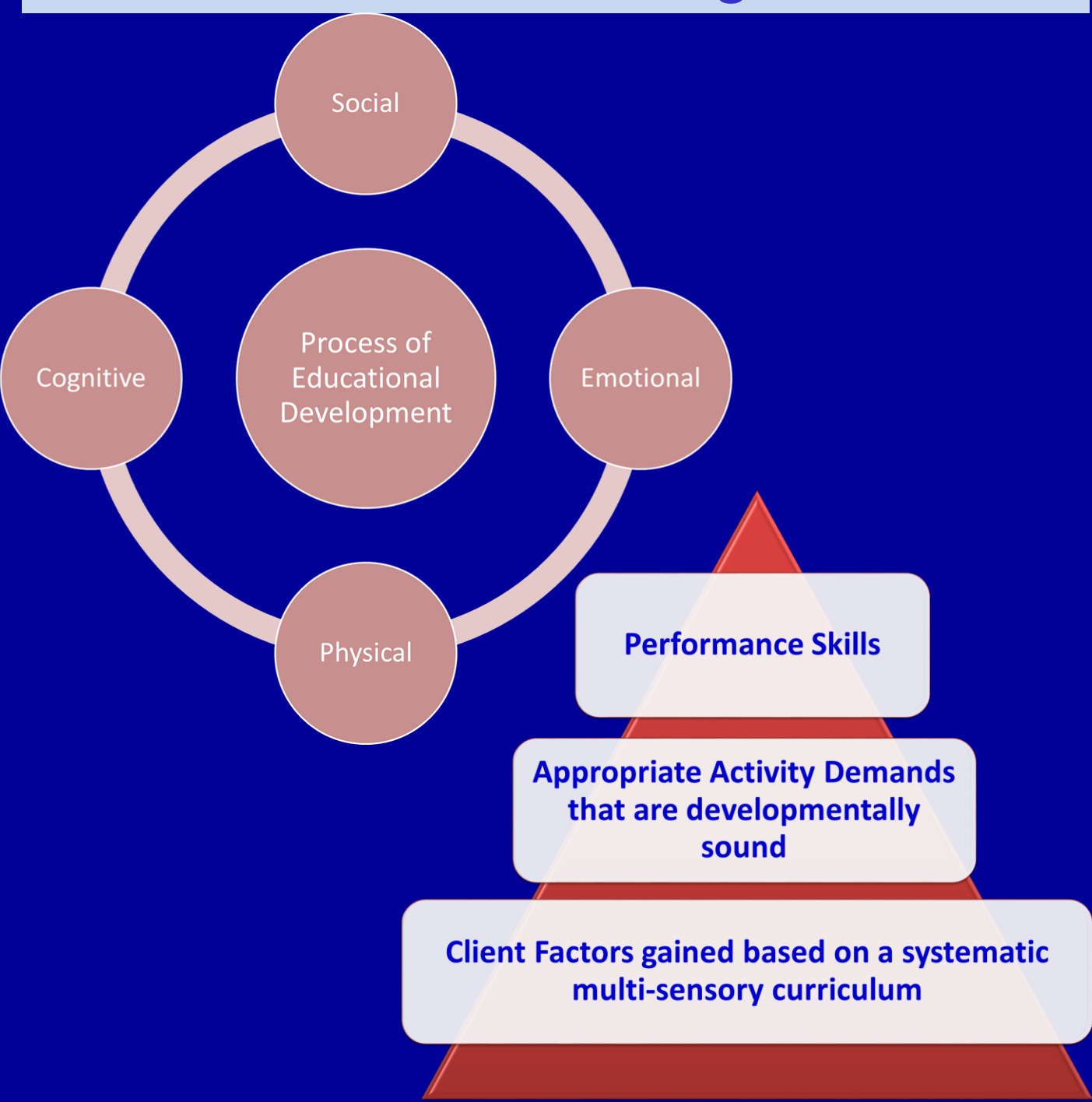
- The statistician utilized SPSS to analyze the test data from the intact group of matched pairs. Analysis was done with a paired T-test to examine the significant of change in scores within each pair.
- Following the application of the Bonferroni adjustment, the significance level was determined to be p=.00625.
- Results of the GRADE raw score were significant. The GRADE grade equivalent scores were not significant, however, scores were approaching significance at p=.009.
- The VMI raw score and grade equivalents were found to be significant at p=.000.
- Neither the raw scores nor the grade equivalency scores for the VMI visual perception subtest were found to be significant with the value of p=.016.
- Both the raw scores and grade equivalency scores for the VMI motor coordination subtest were significant at p=.001 and p=.000 respectively.
- Results considered to be significant:**
 - GRADE raw score
 - Beery VMI raw score & grade equivalent
 - Beery VMI motor coordination subtest raw and grade equivalent

DISCUSSION

- A multi-sensory center-based learning curriculum integrates concepts from community-based practice, center-based learning, and small group instruction in order to provide ample benefits to young students.
- Multi-sensory center-based learning aims to promote well-being and healthy child development, paralleling the aims and results of community-based programs (Worton et al., 2014).
- This study supports conclusions drawn by Winsler et al. (2008) “that center-based childcare programs in the community may be beneficial for fostering school readiness” (p. 314).
- Results and advances of students in this study suggest added support for research that children are able to learn and develop skills from each other within small groups (Wasik, 2008).
- Although the analysis of the GRADE grade equivalents was determined not to be significant, it is approaching significance, suggesting possible clinical relevance for practitioners. Further research is needed to determine the extent of this relevance.
- One can conclude that this curriculum is effective for increasing visual motor and motor coordination skills and that multi-sensory center-based learning has promising benefits for typically developing young learners.
- Continuing to study this curriculum shows improvements can be made to better prepare students performance skills and client factors.

CONCLUSION

Strong preliminary results of this study support the use of higher level research on multi-sensory center-based learning. Results illustrate the effectiveness of this curriculum in improving visual motor and motor coordination skills. This suggests the importance of incorporating OT related concepts by implementing multi-sensory stimulation with focus on fine and gross motor skills. Occupational therapists, as well as other professions, will be able to incorporate these research-supported techniques to facilitate new and retained learning.



REFERENCES & ACKNOWLEDGEMENTS

Available upon request; Casey Herseim ECE
Bright Beginnings Early Learning Academy;
Dawn Evans, OTD, OTR/L; Funding by:
Misericordia University Research Grant



OTails - Animal Assisted Occupational Therapy

Elizabeth Bentz MS, OTR/L, SIPT

MISERICORDIA UNIVERSITY OCCUPATIONAL THERAPY DEPARTMENT, DALLAS PENNSYLVANIA



HYPOTHESIS

Occupational Therapy and Animal Assisted Therapy: Promoting Participation, Psychosocial Well-Being and Mental Health within the Geriatric Population

LITERATURE REVIEW

- Reduce feelings of stress and loneliness (Berry et al., 2012; Banks & Banks, 2005)
- Improve mental functions and emotional regulation (Kawamura, Niiyama, & Niiyama, 2007; Moretti et al., 2011)
- Promote social interaction skills and social participation (Kramer, Friedmann, & Bernstein, 2009; Martindale, 2008; Richeson, 2003)
- Decrease depression, anxiety, and agitation (Le Roux & Kemp, 2009; Majic, Gutzmann, Heinz, Lang, & Rapp, 2013)
- Retain ADL functioning (Menna et al., 2012)
- Increase perceived quality of life (Nordgren & Engstrom, 2014)

PARTICIPANTS

- 6 residents ages 44 years to 86 years
- 4 female; 2 male
- Diagnoses include depression, anxiety, Asperger's syndrome, dementia, Huntingdon's Disease, Alzheimer's, Cerebral Palsy, osteoporosis, kidney disease, and COPD

INSTRUMENTS

Measurement of Pet Intervention (MOPI)

Geriatric Depression Scale (Short Form)

Occupational Profile and AAT Screening Form

Goals Worksheet

Registered Therapy Dog

Satisfaction Surveys



PROCEDURES

One licensed Occupational Therapist will lead the animal assisted OT program one time weekly for 30-40 minute sessions for 4 to 6 weeks with a group of 4 to 6 residents in the nursing facility.

1. Begin each group session with greetings & introductions among the residents and therapy dog team
 2. Discuss the purpose of the OTails program
 3. Review goals and activities for the session
 4. Conduct animal assisted Occupational Therapy activity
 - a) have each resident choose a cup, place treats in cup
 - b) residents dip spoons into peanut butter
 - c) throw balls to therapy dog
 - d) residents choose from a variety of brushes to brush therapy dog, brush dog's teeth with toothbrush
1. Wrap up discussion of the activity
 2. Discuss intervention plan for next week's session
 3. Address any questions

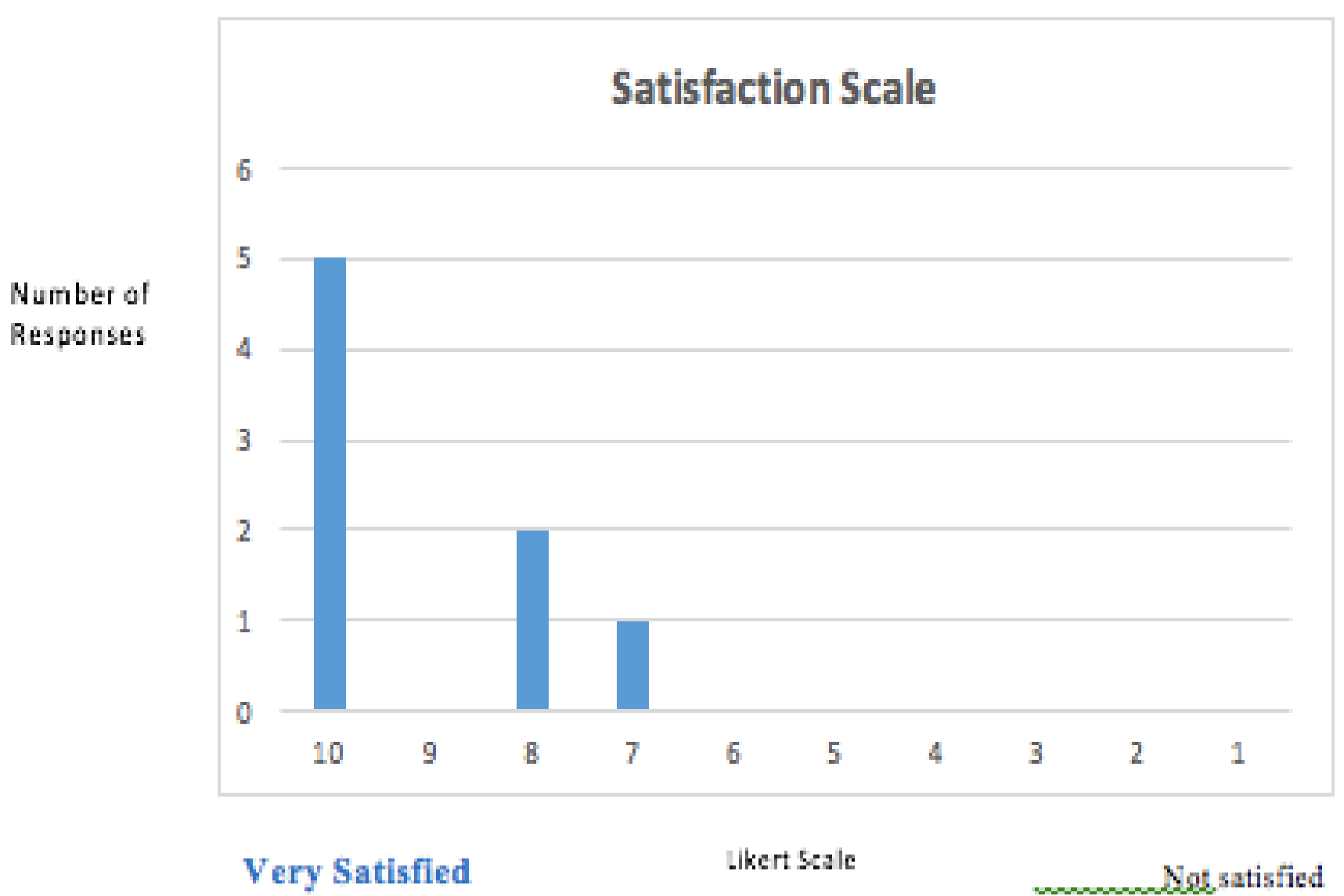


RESULTS

Response Rate = 100% (8/8) includes two staff members

QUESTION	YES	NO
Did the OTails program meet your expectations?	7	1
Was the program fun and engaging?	8	0
Did the OTails program help you reach your goals?	7	1
Did you enjoy having a Therapy Dog in the OT sessions?	8	0
Were you able to socialize with others in the group?	8	0
Would you recommend this program to others?	8	0
TOTAL	48	2

How would you rate this program on a scale of one to 10, with 10 being the highest level of satisfaction, and one being the lowest level of satisfaction?



SURVEY COMMENTS

Resident Comments:

1. Stated, "Oh yeah, loved the dog, come back and I'll teach him some tricks".
2. Is interested in working more with animals since the OTails program. Enjoyed it very much.

Staff Comments:

1. Enjoyed watching the interaction between Maisy and residents. Maisy and Liz improved the residents' mood and gave them something to truly look forward to each visit/program.
2. Loved seeing the interaction between the residents and with Mazie. Some residents responded more to the therapy session than they do in most other programs. You could feel their attention and cheerful faces. Loved this group! Come back!



CONCLUSION

The OTails program survey results indicate that long term care residents have a positive perception of animal assisted OT. Working with a co-therapist, a registered therapy dog, can reinforce the effectiveness of OT interventions to promote participation, psychosocial well-being, and mental health within the geriatric population.

DISCUSSION

The animal assisted OT program, OTails, engaged all the residents to actively participate in a therapeutic group session, while still integrating a client centered approach to address individualized goals developed in partnership with each participant. Working with a registered therapy dog created a relaxed and fun atmosphere where residents could comfortably socialize with each other. One resident who was new to the facility would only leave her room to join the others for the OTails program. She was resistant to all other activities that were offered, but because OTails provided an opportunity to work with a dog, the resident was eager to join the group. Another resident who was 44 years old, was uncomfortable leaving his room for other activities, with the exception of this program. He became animated and vocal while attempting to talk to and brush the dog. A third resident who was often quiet during other programs was very talkative during OTails. The Recreational Director noticed an improved change in mood and behavior in all of the residents.

ACKNOWLEDGEMENTS

Jennifer Dessoie OTD, OTR/L
Alicia Bixler – Recreational Director, Genesis Healthcare
Melissa Winkle OTR/L, FAOTA – Dogwood Therapy Services Inc.
Marge Stiller – Alliance of Therapy Dogs Evaluator



Examining the Impact of a Weighted Blanket on the Stress Responses of Persons on a Dementia Unit

Allison Alexander, OTS, Alexis Campbell, OTS, Jeffrey Kramer, OTS, Jennifer Snyder, OTS,
Ellen McLaughlin, Ed.D, OTR/L, Lauren Zack, OTD, OTR/L

Background Info

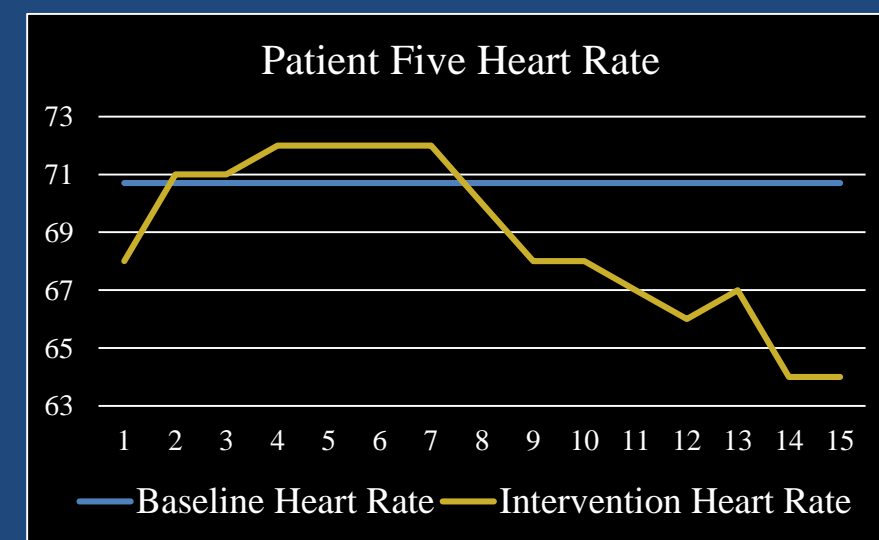
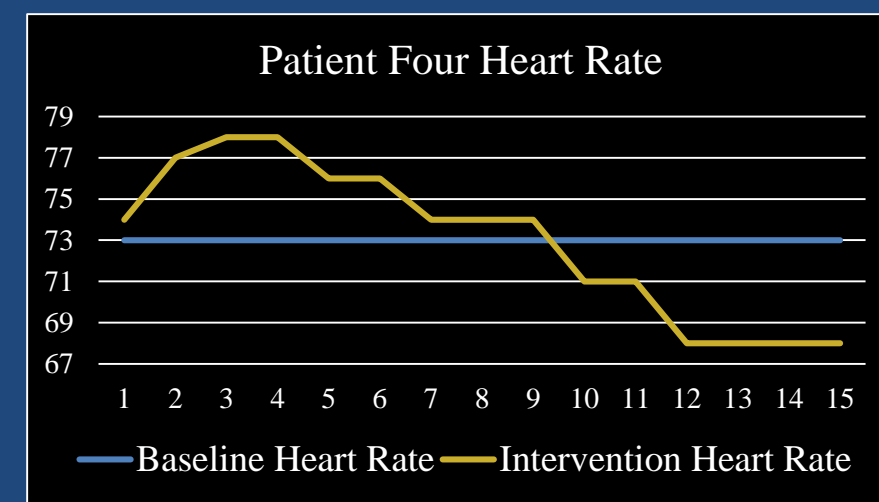
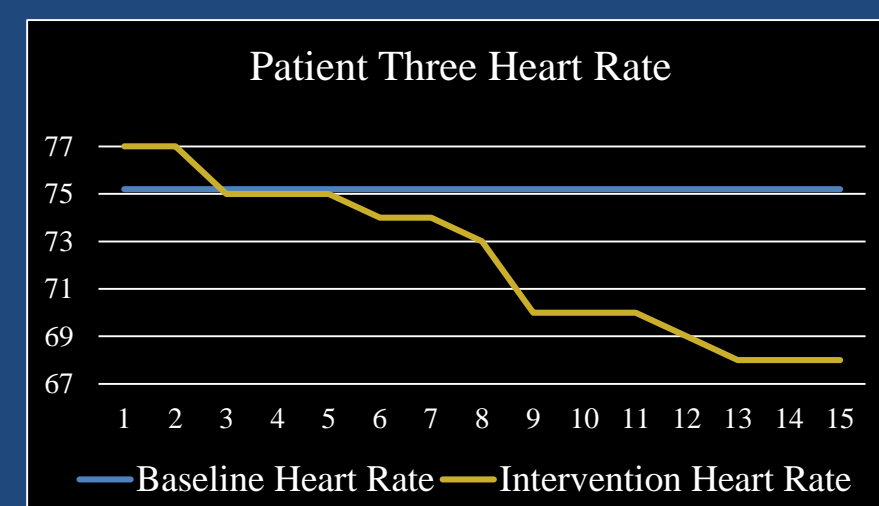
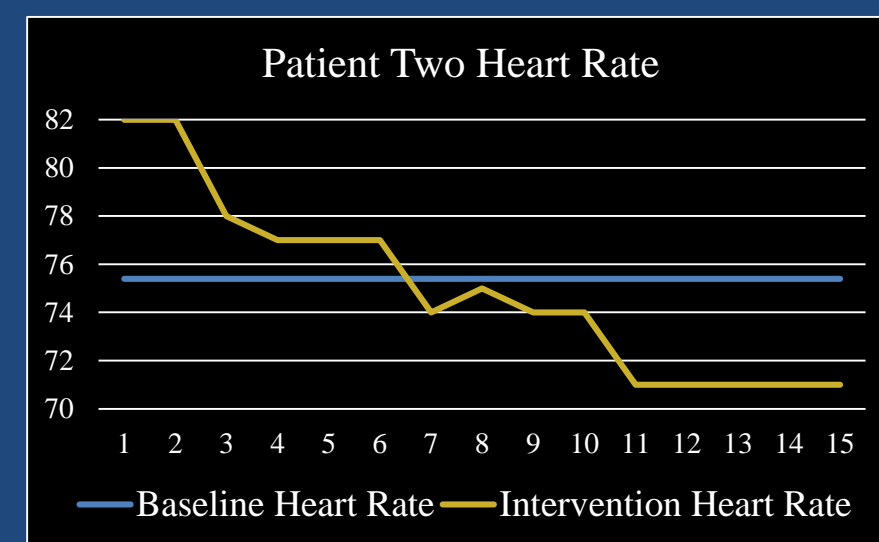
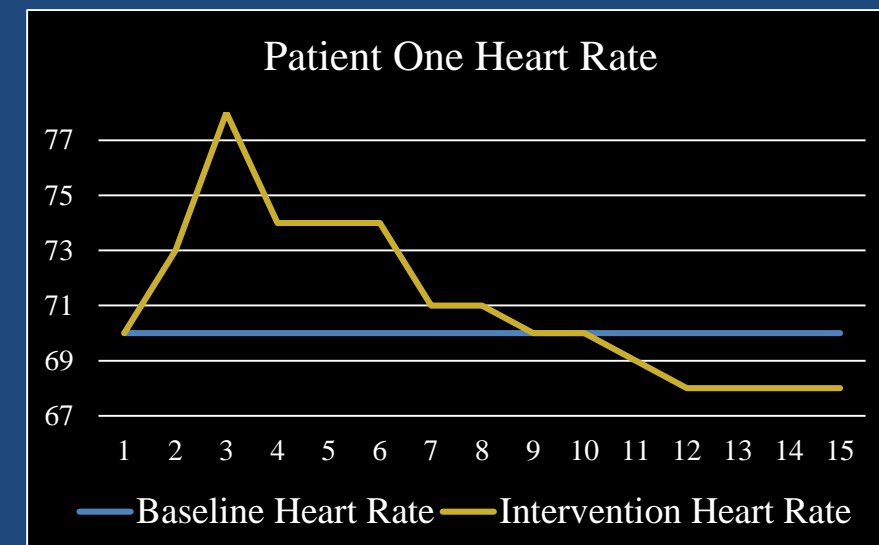
- Dementia is a severe deteriorative condition that gradually impacts the abilities of an individual to cognitively comprehend and process tasks of daily living. From a neuropsychiatric perspective, symptoms of dementia include anxiety, apathy, hallucinations, delusions, and disinhibitions (Fraker, Kales, Blazek, Kavanagh & Gitlin, 2014, p. 4).
- Weighted blankets are a therapeutic modality which provide deep pressure stimulation to the body. This deep pressure should be applied equally and replicates the feeling of being held or swaddled (Grandin, 1992, pp. 63-72). From a neurological perspective, this deep pressure provides a calming mechanism through a series of intricate neurochemical transmissions.
- One way to quantify anxiety levels is through the monitoring of blood pressure and heart rate. Typically the lower the number, the more relaxed and less anxious the individual is.
- The weight of the blanket was 12 pounds. This was chosen, taking into considerations identified by Champagne, Mullen, Dickson and Krishnamurty (2015).

Purpose & Research Design

- The purpose of this study was to examine the impact of weighted blankets on physiological parameters of clients with dementia as a means to gauge their stress response.
- Researchers used a mixed method single subject research design.

Methods

- Data collection consisted of individualized sessions with the principal investigator present in the resident’s room.
- Patients were seated in their wheelchairs with limited distractions. The process began when the principal investigator placed the weighted blanket on the patient for a 15 minute duration.
- Wrist cuffs were placed to obtain blood pressure pre-, mid-, and post-intervention.
- Heart rate and pulse oxygen levels were monitored on a minute-basis throughout the intervention via a pulse oximeter.



Note: Baseline indicates the average of 10 consecutive pre-intervention heart rates.

Heart Rate					Systolic Blood Pressure				
	Delta Δ	%	Increase/decrease	Effect size		Delta Δ	%	Increase/decrease	Effect size
Patient 1	.43	16.6%	Increase	Small	Patient 1	-1.40	41.9%	Decrease	Medium
Patient 2	-.09	3.58%	Decrease	Small	Patient 2	-1.19	38.3%	Decrease	Medium
Patient 3	-.77	27.9%	Decrease	Small	Patient 3	-1.44	42.5%	Decrease	Medium
Patient 4	-1.08	36%	Decrease	Medium	Patient 4	4.41	>50%	Increase	Large
Patient 5	-.33	12.9%	Decrease	Small	Patient 5	-.33	12.9%	Decrease	Small

Quantitative Results

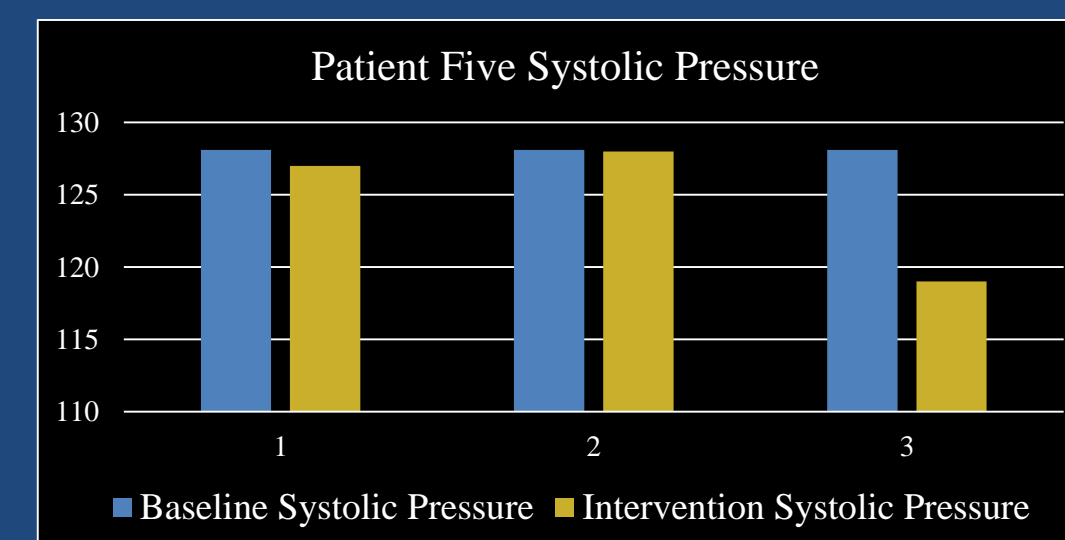
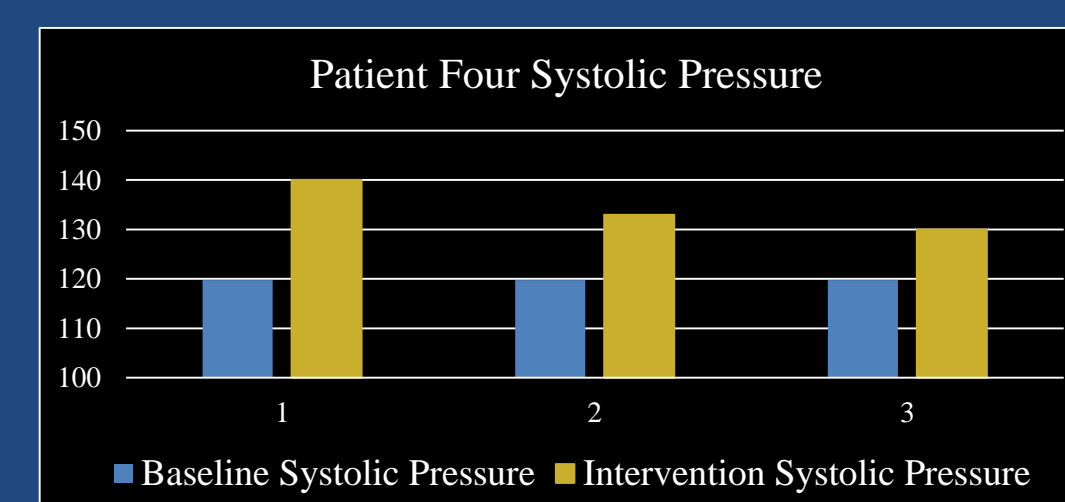
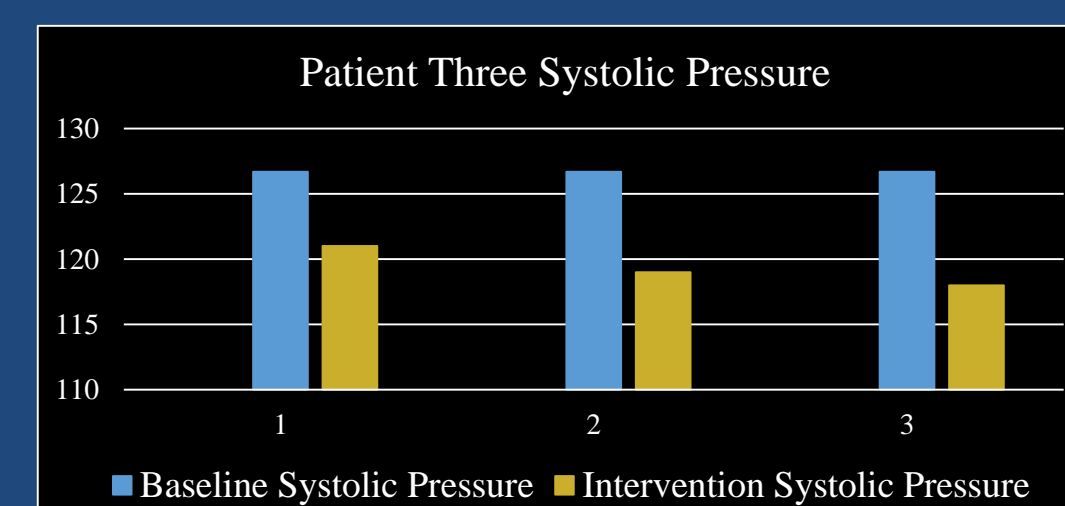
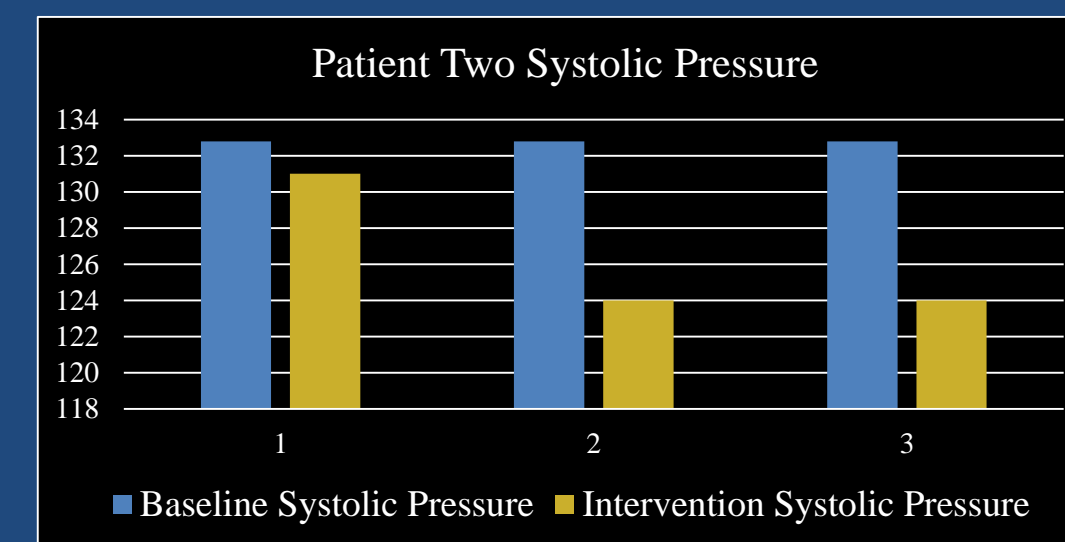
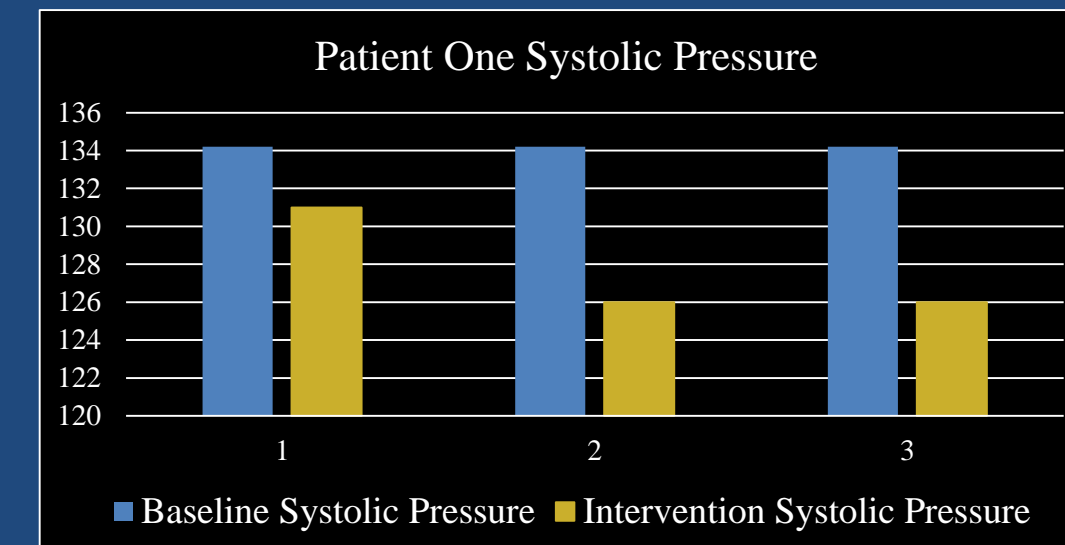
Results were quantified via the effect size measurement of the delta index (Δ).

The ES Method of calculating Δ determines the magnitude of the effect of the intervention in comparison with the baseline (Bloom, Fischer, & More, 2009, p. 474).

To better match the methodology of the study, a modified classification system of Δ was used. This modified classification system was proven to provide accurate results when using single-system data (Parker & Vannest, as cited in Bloom, M., Fischer, J., & Orme, J. G. (2009) .

Within the context of the study, Δ indicates a negative effect of weighted blankets on stress responses. This negative effect is the result of an overall decrease in heart rate and systolic blood pressure.

Data was additionally placed into graphs to provide a visual representation of the effectiveness of the intervention. For both heartrate and blood pressure, a pre-intervention mean which consisted of the 10 previous vital signs collected by nursing staff at the unit. This mean was collected to provide a baseline to compare with intervention data.



Note: Baseline indicates the average of 10 consecutive pre-intervention systolic pressures.

Qualitative Results

- The Behavior Rating Scale (Adapted from Pittsburgh Agitation Scale) monitors four areas of behavior. All areas of behavior were measured on a zero to four scale with zero indicating absent behavior and four indicating severe behavior.

Patient 1

- Aberrant vocalizations: 0 → 0
- Motor Agitation: 2 → 1
- Aggressiveness: 0 → 0
- Resisting Care: 0 → 0

Patient 2

- Aberrant vocalizations: 2 → 1
- Motor Agitation: 3 → 1
- Aggressiveness: 2 → 0
- Resisting Care: 2 → 1

Patient 3

- Aberrant vocalizations: 1 → 0
- Motor Agitation: 2 → 1
- Aggressiveness: 0 → 0
- Resisting Care: 0 → 0

Patient 4

- Aberrant vocalizations: 3 → 1
- Motor Agitation: 2 → 1
- Aggressiveness: 0 → 0
- Resisting Care: 3 → 2

Patient 5

- Aberrant vocalizations: 1 → 1
- Motor Agitation: 1 → 0
- Aggressiveness: 0 → 0
- Resisting Care 0 → 1

Conclusions

- The results of the study indicate that weighted blankets decrease stress responses in individuals with dementia. The majority of patients experienced a decrease in heart rate and systolic blood pressure throughout the intervention. Results from the Behavior Rating Scale demonstrate a decrease or stagnation across all domains of behavior. In conclusion, the results of this study signify weighted blankets have the potential to reduce stress and agitation in patients with dementia. Additional studies with higher levels of evidence should be conducted to provide a higher degree of validity and reliability.

References

- Bloom, M., Fischer, J., & Orme, J. G. (2009). Descriptive statistics. *Evaluating practice: Guidelines for the accountable professional*. (6th ed., pp. 462-487). Publisher: Pearson
- Champagne, T., Mullen, B., Dickson, D., & Krishnamurty, S. (2015). Evaluating the Safety and Effectiveness of the Weighted Blanket With Adults During an Inpatient Mental Health Hospitalization. *Occupational Therapy In Mental Health, 31*(3), 211-233. Fraker, J., Kales, H. C., Blazek, M., Kavanagh, J., & Gitlin, L. N. (2014). The role of the occupational therapist in the management of neuropsychiatric symptoms of dementia in clinical settings. *Occupational therapy in health care, 28*(1).
- Grandin, T. (1992). Calming effects of deep pressure in patients with autistic disorder, college students, and animals. *Journal of Child and Adolescent Psychopharmacology, 2*, 63-72.

