Seventeenth Annual
Master of Occupational Therapy Student
Research Poster Presentations

Friday, December 2, 2016
Rogalski Center Ballroom

Poster Session
1:00 – 2:00 pm

Presentations
2:00 – 4:30 pm

Pinning & Reception
4:30 – 5:30 pm
A Critically Appraised Topic: Effects of Reminiscence Therapy on Agitation in Dementia

Allyson Edwards, MOTS, Paige Eilering, MOTS, Megan Hambly, MOTS, Rachel Kaczinski, MOTS, Jacklyn McCullough, MOTS, and Christine Urish, PhD, OTR/L, BCMH, FAOTA

Abstract
Dementia is a progressive, degenerative cognitive disorder that can lead to a significant loss of independent functioning. This may lead to a profound negative impact upon families and caregivers. Many studies have found a statistically significant correlation between agitation and dementia. Research noted patients with agitated behaviors had resistance towards care, developed sleep disorders, had aggressive behaviors, and were restless. As a result, persons with dementia experienced a decreased quality of life and increased caregiver strain. Research supported the use of reminiscence therapy as an effective intervention to decrease agitation. In order to provide effective implementation of reminiscence therapy, occupational therapists must have knowledge and understanding of the benefits of the treatment. Occupational therapists are trained to utilize the client’s strengths to provide interventions which increase quality of life and participation in occupation. Research suggested a decrease in agitation will improve quality of life in those diagnosed with dementia. A critically appraised topic (CAT) was conducted based on a developed focus question. A comprehensive search of the literature was completed to investigate the evidence for the effectiveness of reminiscence therapy for individuals with dementia. The findings indicate the use of reminiscence therapy may be an effective intervention in reducing agitation in individuals with dementia. Individualized reminiscence programs and inclusion of caregivers in the occupational therapy process are important implications for therapists to consider while incorporating reminiscence therapy as an intervention.

References


Cerebrovascular accidents (CVA) occur when blood flow to the brain stops causing brain cells to begin to die (National Stroke Association, 2015). A common impairment experienced post-stroke is weakness or paralysis on one side of the body, also referred to as hemiparesis. The prevalence of such impairments has a significant effect on functional performance in an individual’s daily life and occupations, therefore, requiring therapeutic intervention. This case analysis was aimed to analyze the effectiveness of a combined home program and clinic based mirror therapy protocol on potential improvements of motor, sensory and visual neglect. Four subjects were gathered who had previously sustained a stroke. They received task based mirror therapy in a clinic setting two times weekly alongside a home program three times weekly, both for a total of five weeks. Function was assessed pre and post-test using the following assessments: Action Research Arm Test, Fugl-Meyer Assessment, Motor Activity Log, Clock Test and Semmes Weinstein Monofilament Test. Results overall suggest that task based mirror therapy in conjunction with a home based mirror therapy program may improve function in individuals with upper extremity hemiparesis after a stroke. However, the degree of effectiveness may be impacted by the timeframe post stroke, frequency and duration of treatment, the prior level of activity and independence. More research is needed to compare an individual’s influence of self-efficacy on overall therapy functional outcomes.

References
Analysis of Occupational Participation and Performance Skills Among Patients with Parkinson’s Disease

Elizabeth Campbell, MOTS, Deanna Lensing, MOTS, Tara Manternach, MOTS, Megan Snow, MOTS, Claire Zanger, MOTS, and Jill Schmidt, OTD, OTR/L

Abstract
Parkinson’s disease (PD) is a chronic neurodegenerative disease that often presents with motor and communication deficits. Individuals may also experience cognitive and psychosocial difficulties often leading to decreased social participation and increased caregiver demands. LSVT BIG and LOUD® is one treatment option utilized for patients with Parkinson’s disease (PwPD). LSVT BIG and LOUD® is administered in sixteen, one-hour sessions over a period of four weeks. Researchers conducted a secondary de-identified data analysis from a Midwestern hospital. The purpose of the current study was to better understand how the LSVT Big® program can positively affect the perceived levels of occupational participation and performance skills of PwPD. Researchers received de-identified data of 73 participants’ pre- and post-test scores on the following instruments: Upper Extremity Functional Scale (UE Functional Scale), the Montreal Cognitive Assessment (MoCA), the Activity-Specific Balance Confidence Scale (ABC Scale), and the Parkinson’s Disease Questionnaire-39 (PDQ-39). Participants’ ages ranged from 48 to 89. Forty-five of the participants were male and 28 were female. Results showed significant differences in the pre- and post-tests for the UE Functional Scale, the ABC Scale, and the MoCA. The PDQ-39 did not yield significant results due to low completion rate. Future research would benefit from consistent completion of the PDQ-39 to better understand participants’ occupational participation and quality of life.

References
Impact of Yoga on Military Personnel Occupational Patterns and Quality of Life

Carl Callaway, MOTS, Corey Hiben, MOTS, Regan McLaughlin, MOTS, Kaitlyn O’Leary, MOTS, Jessica Sherman, MOTS, and Erin Phillips, OTD, OTR/L, CYT

Abstract
Military members often transition back to post combat or civilian life with physical and emotional disruptions, which often remain undiagnosed. The use of yoga as an occupational therapy intervention with active military members may improve their perception of well-being and increase their participation in meaningful activities. This study investigated the impact of yoga on military personnel occupational patterns and quality of life (QoL). Twenty-eight individuals ranging in age from 25-53 participated in a 6 week yoga class. Participants were given two outcome measures pre-and post-intervention: The Life Balance Inventory (LBI) and the World Health Organization Quality of Life- Brief (WHOQOL-BREF). In addition, participants completed a qualitative questionnaire post-intervention. The intervention consisted of an hour-long yoga class, offered biweekly for six weeks, led by a yoga instructor with a background in occupational therapy. Classes included a series of yoga postures, mindfulness techniques, guided moving meditation, and breath work. Results from the WHOQOL-BREF measure were significant overall (p=0.013) and in all four categories: Physical (p=0.020), psychological (p=0.004), social relations (p=0.033), and environmental (p=0.019). Participants reported an increase in life enjoyment (p=0.009), satisfaction with work capacity (p=0.048), and sleep satisfaction (p=0.013). Researchers manually coded the qualitative data. Three overarching themes emerged: improved occupational patterns (habits, roles, routines), mental benefits, and physical benefits. The outcomes of this study indicate that yoga can be used as an effective intervention by occupational therapists while working with military personnel to (a) improve overall quality of life, (b) improve sleep satisfaction, and (c) improve satisfaction with work and social participation.

References
Occupational Therapy in Iowa Schools: Fine Motor Rate of Progress Norms

Ivee Adams MOTS, Heather Albrecht MOTS, Abigail Courtney MOTS, Rachel Flaherty MOTS, Lauren Kapolnek MOTS, and Lynn Kilburg DHSc, MBA, OTR/L

Abstract
Rate of progress (ROP) is used to assess children’s eligibility for occupational therapy services in Iowa schools, but there is currently no standardized method of evaluating rate of progress. The purpose of this study is to develop an effective method of collecting and organizing ROP norms for fine motor skills in typically developing three to six year olds in order to begin data collection. Participants were recruited from four daycare centers in Eastern Iowa, and data was collected from 33 children using an abridged version of the Peabody Developmental Motor Scale-2 (PDMS-2). A brief demographic survey was completed by parents. The sections of the PDMS-2 included fine motor skills commonly addressed in occupational therapy with this population, such as grasp, bilateral hand coordination, and visual motor integration. The data collected was used to begin the process of compiling data for the development of typical peer ROP norms. Further data collection is needed to achieve a larger, more representative sample of participants, and allow for a standardized quick reference chart showing typical fine motor ROP norms.

References
Perceived Changes in Typically Developing Students Who Participate on Inclusive Cheer Teams

Brianna Bosco, MOTS, Stephanie Condon, MOTS, Shelby Hinz, MOTS, Alyssa Langevin, MOTS, Jaclyn Trannel, MOTS, Leah Wies, MOTS and Phyllis Wenthe, PhD, OTR/L

Abstract

The purpose of this study was to discover the perceived outcomes of participation in socially inclusive cheer teams for typically developing students. Questionnaires created by researchers were administered to 40 typically developing students (ages 14-18) on cheer teams at six Midwestern schools. All of the participants were female. The questionnaire examined the participants’ perceptions of their understanding of individuals with a disability, interactions with individuals with a disability, and self-concept both before and after their involvement on the inclusive team. Data analysis revealed all participants indicated a positive change after participation on all individual items surveyed and significant positive change in construct areas of understanding, interaction, and self-concept. Additionally, students who responded positively before participation responded significantly more positively in areas of understanding and interaction after participation. The compilation of past and present research data suggests inclusive cheer programs are beneficial to students with a disability, typically developing students, and the overall culture of the high school. Therefore, occupational therapists should advocate for the offering of inclusive programs in high schools and community settings to promote these positive changes and to create equal opportunities for play, leisure, and social participation experiences.

References


