

**Sixth Annual Proceedings of  
The Society for the Study of Occupation:USA**

**From the Seventeenth Annual SSO:USA Research Conference**

*Lexington, Kentucky  
October 11-13, 2018*

**Sixth Annual Proceedings of the  
Society for the Study of Occupation: USA**

**SSO: USA Annual Research Conference  
Lexington, Kentucky  
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# Society for the Study of Occupation: USA Conference 2018

## Table of Contents

Mission Statement and Objectives of SSO: USA.....	i
History of the Society for the Study of Occupation: USA.....	ii
Ruth Zemke Lecture in Occupational Science.....	iii
About the Ruth Zemke Lecture in Occupational Science.....	iv
Theme Speaker.....	v
Thank You.....	vi
List of Previous Conferences.....	vii - viii
Conference Proceedings.....	1 - 115
Alphabetical List of Presenters.....	116 - 117
Schedule at a Glance.....	118 - 124

## **SOCIETY FOR THE STUDY OF OCCUPATION: USA**

### **MISSION STATEMENT**

**The SSO:USA is a research society that strives to build the body of knowledge in occupational science to benefit humanity.**

**The society values are:**

- Collegiality
- Collaboration
- Critical discourse
- The development of researchers
- The application of knowledge within a variety of professions
- Shared occupational experiences
- Operating in ways that are open, transparent, fiscally responsible and member and data-driven
- Researchers, students, and practitioners
- Members who are formally trained in occupational science
- And members who are formally trained in other disciplines and whose work integrates well with occupational science

### **OBJECTIVES**

**The objectives of SSO:USA are:**

- To form a national community of scholars to engage in the dynamic exchange of ideas to support the global discipline of occupational science
- To provide a forum to promote and disseminate research in occupational science to the public
- To foster cutting-edge theory and research of occupation through the establishment of networks, resources, collaborations, and other identified supports.
- To explore and expand the knowledge of occupation, the application of occupations to understanding of the human condition, and to foster understanding the fundamental nature of occupation in health and well-being
- To study the interrelationship of the discipline of occupational science and the profession of occupational therapy
- To address and quality of the occupational experience of participants in its events

## **SSO:USA HISTORY**

**By Elizabeth Larson, 2002**

History can be made in those mundane moments when neither the impact nor the influence of the future can fully be understood. In 1917 a group of scholars made history when they met to establish the profession of occupational therapy. Their vision for this fledging profession, focused on the core idea of occupation, was: to advance “occupation as a therapeutic measure,” “study... the effects of occupation upon the human being,” and disseminate “scientific knowledge of this subject.” Although this date and time marked a turning point, it was in fact a culmination of many individuals’ efforts and advocacy. As in any good story, the founding mothers and fathers could not have predicted the course the profession of occupational therapy would take and how long it would be before a discipline that specifically studied occupation was developed.

The founders’ vision served as the groundwork for what has emerged today as the discipline of occupational science. Interest in occupational science has surfaced on nearly every continent where scholars are joining together in study groups, on listservs and web pages, and at conferences to discuss the ideas and their applications to occupational therapy. This proliferation of vents on occupational science has surprised many but seems to be meeting a growing need among practitioners and scholars to better understand and use occupation therapeutically. “Occupational science ... is developing in ways that we could never imagined or predicted-its shape and character are being formed by scholars who embrace it and the students who earn doctoral degrees in the discipline” (Zemke & Clark, 1996).

In November 2002, nearly 90 years later, another landmark event in the evolution of occupational science occurred. In Galveston, Texas, another group of scholars met to formally establish the first U.S.-based research society aimed at addressing the mission outlined by the founders. This event too marked the cumulative efforts of many individuals over several years. Since the First Annual Research Conference in 2002, the Society for the Study of Occupation: USA has continued the original mission of facilitating high quality scholarship. There were so many people who contributed and offered support, both financial and emotional, that it would be impossible to mention them all here. Suffice to say, it takes the effort of many to continue the mission.

SSO:USA Web Page Address: <http://www.sso-usa.org>

## **RUTH ZEMKE LECTURER IN OCCUPATIONAL SCIENCE: DR. WENDY WOOD**

SSO:USA Seventeenth Annual Research Conference

*Envisioning the Environment, Time and Occupation*



This year Dr. Wendy Wood is our esteemed speaker for the Ruth Zemke Lecture in Occupational Science. She will take us on the journey of occupation in context with her lecture titled *Envisioning the Environment, Time and Occupation*.

Wendy Wood, Ph.D., OTR, FAOTA, is Professor of Equine Sciences and Occupational Therapy and Director of Research of the Temple Grandin Equine Center at Colorado State University. A dedicated educator, Dr. Wood has played leadership roles in establishing two new Ph.D. programs, one in occupational science at the University of North Carolina-Chapel Hill and the other in occupation and rehabilitation science at Colorado State. She has also published extensively on issues of leadership, professionalism, and education in occupational therapy and served as an Associate Editor of the American Journal of Occupational Therapy. In 1998, Dr. Wood was admitted to the Roster of Fellows of the American Occupational Therapy Association for her professional leadership as a scholar and writer. In 2017, AOTA recognized Dr. Wood as one of 100 influential people in occupational therapy's first 100 years. As an occupational scientist, Dr. Wood was an early leader in the establishment of the Society for the Study of Occupation: USA. She has also extensively studied intersections among environmental features and patterns of time-use and well-being of captive nonhuman primates and institutionalized older adults with dementia. The Canadian Association of Occupational Therapists conferred its 2018 Golden Quill Award on Dr. Wood and four of her graduate students for a paper they authored that drew upon this research in occupational science to introduce an empirically based dementia-specific conceptual practice model in occupational therapy. Presently, as Director of Research of the Temple Grandin Equine Center, Dr. Wood and her graduate students are studying equine-assisted interventions for people who face daunting life challenges, with an emphasis on children with autism and older adults with dementia, as well as their care partners.

## **ABOUT THE DR. RUTH ZEMKE LECTURESHIP IN OCCUPATIONAL SCIENCE**

In recognition of Dr. Ruth Zemke's mentorship, questing intellect, and ongoing efforts to foster an occupational science community of researchers, this lectureship was named in her honor. The lectureship is "designed as a forum to present visionary, theoretical, and critical analyses of occupational science." (Larson, 2002).

The recipients of the Ruth Zemke Honorary Lectureship are given an engraved kaleidoscope in recognition for their contribution to the study of occupation. Occupation is made up of simple, everyday actions that can be combined in an infinite variety of ways. This variation creates a complexity that requires examination from many perspectives in order to understand its many facets and meanings in people's lives. According to Dr. Zemke, the kaleidoscope serves as a metaphor for occupation. It is a collection of simple, everyday items that can create beautiful and often complex images. People change their perspectives by rotating the kaleidoscope to see the endless variety of images created. Indeed, the kaleidoscope is a well-chosen keepsake for the recipients of the Ruth Zemke Honorary Lectureship.



**THEME SPEAKER: DR. JO SOLET**

SSO:USA Seventeenth Annual Research Conference

*Sleep Rocks!*



Jo M. Solet, M.S., Ed.M., Ph.D., OTR/L is trained as a clinician, educator, and research scientist, and is uniquely qualified to contribute to interdisciplinary efforts, often serving in integrative and translational capacities. She is a strong advocate for the importance of sleep to health, well-being and learning.

Her doctoral research focused on adaptation to injury, illness, and disability. Recognizing that physical contexts may compromise or enhance functioning, especially as mediated by sleep, Dr. Solet served as principal investigator of a research project with colleagues at the Harvard Medical School Division of Sleep Medicine to explore the arousal effects of hospital sounds on fully monitored sleeping subjects. This trans-disciplinary effort drew on behavioral medicine, acoustical engineering, and sleep neuroscience, informing decision-making for the official Guidelines for the Design and Construction of Healthcare Facilities. She also served as a co-investigator in a parallel behavioral project studying the effects of changing hospital night-care routines to limit patients' care-related sleep disruption and to improve medical outcomes.

Dr. Solet was elected and served as Faculty Chair of the Harvard Medical School/Harvard School of Dental Medicine Joint Committee on the Status of Women. She remains deeply committed to the full participation of women and under-represented minorities in science and medicine.



## THANK YOU

Conference Committee Members: Mariana D'Amico (Chair), Doris Pierce (Chair-Elect), Jeanine Blanchard, Amber Angell, Aaron Eakman, Antoine Ballard, Nancy Bagatell, Jenny Pitonyak, Aaron Bonsall, Linda Buxell, Sheama Krishnagiri

Site Committee Chair: Doris Pierce, Eastern Kentucky University, just amazing!

Site Committee Members: Maryellen Thompson, Julie Batisberger, Anne Fleischer, Kathy Splinter-Watkins, Amy Marshal, Toby Scott-Cross, Geela Spira

Jeanine Blanchard for her incredible communications, technology and moral support for all aspects of this conference

Leadership of SSO:USA:

Chair: Jyothi Gupta, A.T. Still University

Secretary: MaryEllen Thompson, Eastern Kentucky University

Treasurer: Aaron Bonsall, A.T. Still University

Research Committee Chair: Antoine Bailliard, University of North Carolina at Chapel Hill

Communication Committee Chair: Jeanine Blanchard, University of Southern California

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Legal Committee Chair: Beth Ekelman, Cleveland State University

Abstract Review Coordinator: Sheama Krishnagiri, and volunteer reviewers

All the presenters for providing the contents of the conference proceedings

Proceedings Editor: Aaron Eakman, Colorado State University

Assistant to the Proceedings Editor: Anna Fox, Colorado State University

## **PAST ANNUAL CONFERENCES**

First Research Conference; Inaugural Lecturer: Ruth Zemke; November 14-16, 2002, Galveston, Texas

Second: Research with an Attitude; Ruth Zemke Lecture in Occupational Science Lecturer: Elizabeth Yerxa October 16-18, 2003 Park City, Utah

Third: Scholarship in the High Desert; Ruth Zemke Lecture in Occupational Science Lecturer: Jeanne Jackson October 29-31, 2004 Warm Springs, Oregon

Fourth: Building a Community of Scholars Coast to Coast; Ruth Zemke Lecture in Occupational Science Lecturer: Florence Clark October 27-29, 2005 Potomac, Maryland

Fifth: Spanning a Community of Scholars: Occupational Science Research from the Heartland; Ruth Zemke Lecture in Occupational Science Lecturer: Charles Christiansen October 27, 29, 2005 St. Louis, Missouri

Sixth: A Community of Scholars: Crossroads of Culture and Occupation; Ruth Zemke Lecture in Occupational Science Lecturer: Graham Rowles October 25-27, 2007 Albuquerque, New Mexico

Seventh: Occupations Under the Sun: Expand Your Scholarly Horizons; Ruth Zemke Lecture in Occupational Science Lecturer: Clare Hocking October 23-25, 2008 Fort Lauderdale, Florida

Eighth: Colorful Views of Research Methods in the Northeast; Ruth Zemke Lecture in Occupational Science Lecturer: Virginia Dickie October 14-16, 2009 New Haven, Connecticut

Ninth: CSOS and SSO: USA Joint Occupational Science Conference; Ruth Zemke Lecture in Occupational Science Lecturer: Gelya Frank October 14-16, 2010 London, Ontario, Canada

Tenth: Mountaintop Reflections: Learning from Ten Years as a Scholarly Community; Ruth Zemke Lecture in Occupational Science Lecturer: Doris E. Pierce October 20-22, 2011 Park City, Utah

Eleventh: Occupation and Place: Sustainability, Balance & Occupation Ruth Zemke Lecture in Occupational Science Lecturer: Malcolm P. Cutchin October 4-6, 2012 Portland, Oregon

Twelfth: Occupation and Education Ruth Zemke Lecture in Occupational Science Lecturer: Debbie Laliberte Rudman October 17-19, 2013 Lexington, Kentucky

Thirteenth: Joint International Conference in Occupational Science Globalization & Occupational Science: Partnerships, Methodologies & Research SSO:USA; Ruth Zemke Lecture in Occupational Science: Dr. Elizabeth Townsend October 16 to 18, 2014 Minneapolis, Minnesota, USA

Fourteenth: Sun, Scholarship, and Occupation; Ruth Zemke Lecture in Occupational Science  
Ruth Humphry. October 1-3, 2015. Fort Lauderdale, FL.

Fifteenth: Third Joint International Conference in Occupational Science: Navigating the Seas of  
Change: Diversity of Occupation; Ruth Zemke Lecturer in Occupational Science: Kathlyn Reed:  
Pioneering OT and OS: Ideas & Practitioners before 1917; September 29-October 1, 2016  
Portland, Maine

Sixteenth: Participation: People, Places, & Performances. Ruth Zemke Lecture in Occupational  
Science Panel of RZLOS Lecturers: Drs. Malcolm Cutchin, Jeanne Jackson, Kathlyn Reed  
Charles Christiansen, Ruth Humphry, and Doris Pierce. October 19-21. Seattle, Washington

**6TH ANNUAL SSO: USA CONFERENCE PROCEEDINGS, 2018**

**THURSDAY, OCTOBER 11, 2018**

**POSTER SESSION**

**ASSESSING NEEDS OF FAMILY CAREGIVERS ALONG THE DEMENTIA CARE TRAJECTORY: A SCOPING REVIEW**

Beth Fields, *University of Pittsburgh*

Rachel Jaffe, *University of Pittsburgh*

Juleen Rodakowski, *University of Pittsburgh*

**Abstract**

Statement of Purpose: The number of adults living with dementia continues to grow, increasing the demand of family caregivers for assisting adults with dementia in completing daily occupations such as errands, self-care, and complex medical and nursing tasks. The caregivers' responsibilities evolve as dementia progresses. Despite acknowledgement that caregivers are critical in providing support in occupations, many report dissatisfaction with their involvement along the dementia care trajectory, and thus, feel ill-equipped to provide necessary care. It is critical to understand the occupational needs of caregivers of adults with dementia for identifying supportive strategies and delivery of services across care settings. A scoping review was utilized to identify and characterize occupational needs of caregivers of adults with dementia across care settings.

Method: An electronic literature search of Medline, PsycINFO, and CINAHL of qualitative papers on occupational needs of caregivers of adults with dementia published in English between 2006 and present was completed. The review was conducted following guidelines set forth by The Joanna Briggs Institute Manual for Scoping Reviews. Two levels of screening were used on 11,475 citations. Data were extracted from included papers and mapped onto a caregiver framework from the National Center on Caregiving. This framework identifies seven domains of occupational need: context, care-recipient health and functional status, values and preferences, health and well-being of caregiver, consequences of caregiving, skills and knowledge of caregiver, and resources. All data were analyzed in the qualitative software program, NVivo.

Results: A total of 10 papers met inclusion criteria. Papers focused on needs of caregivers in hospitals (7 papers) and community-based settings (3 papers). Consequences of caregiving were coded 60 times (40%), followed by resources coded 24 times (16%), values and preferences coded 23 times (15%), and caregiver health coded 22 times (15%). The other three domains were infrequently coded and when combined, cover the remaining 14% of the database.

Discussion/Implications for Occupational Science: Findings suggest that an emphasis on occupational needs related to context, health and functional status of care-recipient, and skills

and knowledge of caregivers of adults with dementia in institutional or primary care settings is warranted. Limited knowledge on these occupational needs and settings is problematic if we are to equip caregivers to be successful at helping their loved ones along the dementia care trajectory. Occupational scientists are well-positioned to identify, develop, and analyze knowledge on occupational needs of caregivers of adults with dementia that transition through care settings.

### **Questions for Discussion**

1. What diverse forms of occupation represent family caregivers of older adults with dementia?
2. How can a transactional perspective of care setting, family caregiver, and older adult with dementia best be studied and described?
3. How should occupational science be used to inform the development of strategies and delivery of services for family caregivers of older adults with dementia, and what are its limits?

### **References**

- Kaiser, R. M., & Kaiser, S. L. (2017). The Insiders as Outsiders: Professionals Caring for an Aging Parent. *Gerontologist*, 57(1), 46-53. doi:10.1093/geront/gnw104
- Feinberg, L., & Houser, A. (2012, June). Assessing Family Caregiver Needs: Policy and Practice Considerations. Retrieved from <http://www.caregiving.org/wp-content/uploads/2010/11/AARP-caregiver-fact-sheet.pdf>
- Gitlin, L. N., & Schulz, R. (2012). Family caregiving of older adults. In *Public health for an aging society*, edited by T. R. Prohaska, L. A. Anderson, and R. H. Binstock. Baltimore, MD: The Johns Hopkins University Press. Pp. 181-205.
- National Academies of Sciences, Engineering, and Medicine. (2016). *Families caring for an aging America*. Washington, DC: The National Academies Press.

## **ASSOCIATION BETWEEN SLEEP QUALITY AND SENSORY PROCESSING PATTERNS IN COMMUNITY-DWELLING OLDER ADULTS.**

Megan Chang, *San Jose State University*

Megan Sadou, *San Jose State University*

Sarah McDonald, *San Jose State University*

Barbara Moran, *San Jose State University*

Diana Nguy, *San Jose State University*

Stephanie Loh, *San Jose State University*

## **Abstract**

**Statement of Purpose:** Sleep disturbances increase with age and place older adults at risk for falls, cognitive deficits, and difficulties with social or occupational engagement. Although past studies demonstrated relationships between poor sleep quality and sensory processing patterns in children and adults, little is known in older adults.

**Methods:** This survey study aimed to examine the relationships in U.S. community-dwelling adults 60 years and older. One hundred and six respondents completed two assessment questionnaires: Pittsburgh Sleep Quality Index (PSQI) and Adult Sensory Processing Scale (ASPS). The PSQI assesses overall sleep quality and seven sleep components: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction. The ASPS, composed of 11 factors, was developed based on sensory domains and the following processing patterns; over-responsive, under-responsive and seeking.

**Results:** Results showed that 54% of respondents had sleep disturbance. Sleep duration ranged from 3.5 to 10 hours with an average of 7.3 hours ( $sd = 1.2$ ). Overall, poor quality of sleep is significantly correlated with over-responsive to auditory and vestibular input as well as under-responsive to proprioceptive-vestibular input. Interestingly, older adults who are auditory and proprioceptive seekers may not experience negative impacts on sleep quality. When compared to adult norms for ages 18-64, older adults have significantly higher scores in all sensory factors, except for proprioceptive seeking.

**Discussion and Implications to Occupational Science:** Sleep is an essential occupation across lifespan and no exception for older adults. Results from this study suggest therapists to address the sensory needs of clients during sleep consultations for community-dwelling older adults, particularly in auditory processing and proprioceptive-vestibular inputs that affect postural-motor abilities. Additionally, norms for sensory processing in older adults need to be developed, and there may be sensory preference changes in older adults. Further research is needed to explore interaction effects of culture, environment, and biological aging processes on the relationships of sensory processing preferences and quality of sleep.

## **References**

- Blanche, E. I., Parham, D., Chang, M., & Mallinson, T. (2014). Development of an adult sensory processing scale (ASPS). *American Journal of Occupational Therapy*, 68(5), 531–538. <http://doi.org/10.5014/ajot.2014.012484>
- Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1988). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research*, 28, 193–213. [http://doi.org/10.1016/0165-1781\(89\)90047-4](http://doi.org/10.1016/0165-1781(89)90047-4)
- Engel-Yeger, B., & Shochat, T. (2012). The relationship between sensory processing patterns and sleep quality in healthy adults. *Canadian Journal of Occupational Therapy*, 79(3), 134–41. <http://doi.org/10.2182/cjot.2012.79.3.2>

Foley, D. J., Monjan, A. A., Brown, S. L., Simonsick, E. M., Wallace, R. B., & Blazer, D. G. (1995). Sleep complaints among elderly persons: An epidemiologic study of three communities. *Sleep*, 18(6), 425–432. <http://doi.org/10.1093/sleep/18.6.425>

Leland, N. E., Marcione, N., Niemiec, S. L. S., Kelkar, K., & Fogelberg, D. (2004). What is occupational therapy's role in addressing sleep problems among older adults?. *OTJR: occupation, participation and health*, 34(3), 141-149.

## **GUIDELINES FOR ASSISTING INDIVIDUALS IDENTIFY PERSONALLY MEANINGFUL AND PSYCHOLOGICALLY REWARDING OCCUPATIONS FOR INCORPORATION INTO INDIVIDUAL LIFESTYLES**

Moses N Ikiugu, *University of South Dakota*

Whitney Lucas-Molitor, *University of South Dakota*

Diana Feldhacker, *University of South Dakota*

### **Abstract**

**Background:** Ikiugu, Hoyme, Mueller, and Reinke (2016) found that occupations that were both meaningful and psychologically rewarding and therefore were likely to activate the reward neural pathways and lead to feeling of wellbeing and health were perceived as fun, mentally and physically stimulating, and connecting people with others.

**Purpose:** Based on the above research findings, the purpose of this study was to develop an evidence-based set of guidelines for identification of meaningful and psychologically rewarding occupations so that they can be incorporated deliberately into peoples' lifestyles in order to foster well-being and health.

**Methods:** We conducted a meta-analysis to determine the overall effect of participation in meaningful occupations on health and well-being among adults. Studies included in the meta-analysis were multidisciplinary and they were published in the previous 10 years (2007-2017). All the studies included meaningful and/or psychologically rewarding occupations as the independent variables and perceived health and/or well-being as dependent variables. The findings from meta-analysis indicated that there was a small to medium effect of participation in meaningful and psychologically rewarding occupations on perceived health and well-being.

Based on the above findings, we developed guidelines for use of meaningful and psychologically rewarding occupations as media in occupational therapy interventions as follows: 1) developed an assessment protocol to help service recipients identify meaningful and psychologically rewarding occupations (occupations that have the characteristics identified by Ikiugu et al., i.e., are fun, mentally and physically stimulating, and connect individuals with other people); 2) Procedure for collaborating with service recipients in intervention planning based on the

identified meaningful and psychologically rewarding occupations; 3) Procedure for intervention implementation; and 4) Assessment and monitoring of outcomes.

Findings: The newly developed guidelines were tested on one of the researchers. It was found to work as intended.

Conclusion: The developed guidelines could be a useful tool in occupational therapy practice evaluation and intervention planning. The effectiveness of the developed guidelines in enhancing health and well-being is currently being tested through further research.

### **Questions for Discussion**

1. How do you currently ensure that you participate in personally meaningful and psychologically rewarding occupations regularly?
2. How useful do you think the guidelines discussed here today would help you incorporate meaningful and psychologically rewarding occupations more deliberately in your life?
3. How could you use the guidelines presented here to assist other people live optimally meaningful and psychologically rewarding lives?

### **References**

American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3<sup>rd</sup> ed.). American Journal of Occupational Therapy, 68(Supplement 1), S1-S48. doi.org/10.5014/ajot.2014.682006

Ikiugu, M. N., Hoyme, A. K., Mueller, & Reinke, R. R. (2016). Difference between meaningful and psychologically rewarding occupations: Findings from two pilot studies. Journal of Occupational Science, 23(2), 266-277. doi: 10.1080/14427591.2015.1085431

## **IS THERE A POTENTIAL ROLE FOR OCCUPATIONAL THERAPISTS TO CONSIDER THE SLEEP QUALITY OF OLDER ADULTS?**

Aislinn F Lalor, *Monash University, Australia*

Ted Brown, *Monash University, Australia*

Terry Haines, *Monash University, Australia*

### **Abstract**

Introduction: Sleep is an essential occupation and can impact engagement in everyday occupations. Older adults have the highest proportion of hospitalisations in Australia and are confronted with a change of environment during a hospital admission. This can impact on an older person's sleep and negatively impact the ability to recover and return to previous levels of function.



**Objectives:** To examine extent, and identify factors associated with, impaired sleep quality during and following hospitalisation for older adults in order to identify possible sub-groups for appropriate occupational therapy intervention.

**Methods:** Structured questionnaires completed by of 311 hospitalised older Australian adults gathered data regarding demographics, sleep quality, cognition, personality, resilience, stoicism, anxiety/depression symptoms, falls history, activity participation, and social isolation. Stepwise logistic regression analyses were undertaken to determine factors associated with impaired sleep quality during and following hospitalisation.

**Results:** Poor pre-hospital sleep quality was the biggest contributor to in- and post-hospital sleep quality for older adults. Symptoms of anxiety/depression, higher education level, conscientious personality, and not having a diagnosis of a stroke were all additional contributors to poorer sleep quality for hospitalised older adults. Bedtimes, body mass index, stoicism and fortitude, falls occurring pre-hospital, participation in household activities, neurological disorders, and culturally and linguistically diverse backgrounds were all additional contributors to poorer sleep quality post hospitalisation.

**Conclusions:** Occupational therapists can assume an important role in the assessment of pre-hospital sleep quality of older adults, early in hospital admissions, to ultimately provide a targeted comprehensive intervention approach during and following hospitalisation.

### **Questions for Discussion**

1. What are the implications for occupational therapists to assist older adults with assessment of pre-hospital sleep quality?
2. What do occupational therapists offer to distinguish them from other health professionals within the field of sleep?
3. How can occupational therapists provide targeted and comprehensive intervention to sleep quality for older adults during and following hospitalisation?
4. What can occupational therapists do to be better recognised for their involvement within the field of sleep? particularly with older adults?

### **References**

American Occupational Therapy Association (2014). Occupational therapy practice framework: Domain & process, 3rd edition. *American Journal of Occupational Therapy*, 68(S1), S1–S48. doi:10.5014/ajot.2014.682006

Boswell, J., Thai, J., & Brown, C. (2015). Older adults' sleep. In A. Green & C. Brown (Eds.), *An Occupational Therapist's Guide to Sleep and Sleep Problems* (pp. 185–206). London, UK: Jessica Kingsley Publishers.

Buysse, D. J. (2014). Sleep health: Can we define it? Does it matter? *Sleep*, 37(1), 9–17. doi:10.5665/sleep.3298

Kucharczyk, E. R., Morgan, K., & Hall, A. P. (2012). The occupational impact of sleep quality and insomnia symptoms. *Sleep Medicine Reviews*, 16(6), 547–559.  
doi:10.1016/j.smrv.2012.01.005

## **LATE-CAREER UNEMPLOYMENT HAS MIXED EFFECTS IN RETIREMENT**

Voss Wright Maren, *University of Utah*

Beth Merryman, *Towson University*

Lisa Crabtree, *Towson University*

Kathy Subasic, *Towson University*

Wendy Birmingham, *Brigham Young University*

Lori Wadsworth, *Brigham Young University*

Man Hung, *University of Utah*

### **Abstract**

**Aims:** Paid work as a form of occupational engagement is an activity pattern that shifts both during unemployment and during retirement. In cases where the retirement is involuntary, it constitutes a form of lost work opportunity similar to unemployment. Occupational engagement is a necessary element of health and wellness generally, and accordingly lost work opportunity and the occupational deprivations it incurs have demonstrated negative effects on individual level well-being. Unemployment and involuntary retirement have both been linked to poorer physical and mental health outcomes. This paper analyzes work transitions during the pre- and post- retirement years to gain perspective on the challenges of occupational deprivation that might compromise health.

**Methods:** A total of 24 retired individuals with late-career unemployment were interviewed at the Huntsman World Senior Games in October 2016 and demographic data was collected. Education levels and income were higher among the sample than the national average. Mental health levels were consistent with national averages among this age group. Interviews were analyzed for relevant themes utilizing Braun and Clarke's (2006) approach to thematic analysis and NVivo software. Themes and interpretations were evaluated against existing theory.

**Results:** Results revealed that 1/6 of individuals with unemployment just prior to retirement did not classify this work displacement as unemployment. Themes identified included struggle during unemployment, the importance of choice, a period of transition, and resilience in the face of challenges. Choice and autonomy in the retirement years contributed to the noted resilience. Concepts of productivity and meaningful engagement shift during the retirement years toward

wellness derived from purposeful activity suggesting occupational models may need to reconsider concepts of productivity and purpose for this age group.

**Conclusions:** This study provides insight into the non-economic aspects of late-career unemployment and the implications for well-being. The noted themes of adaptation and resilience in the face of occupational loss, particularly in regards to shifts in the concept of “doing” during the retirement years, make a contribution to occupational well-being models of mature adults. Themes identified indicate the value of paid work in aging wellness. However, the expenditure of time toward paid work may erode time and energy resources needed for well-being enhancing activity among older adults as they experience a slowing of life pace. Choice was a critical element in well-being. Bridge-employment and flexible work arrangements during the retirement transition may be a useful policy solution to manage the negative effects of late-life unemployment scenarios. This study adds to evidence that choice and agency, particularly about paid work, play an important role in the life satisfaction of older adults.

### **Questions for Discussion**

1. How can we relate the construct of "doing" to mature populations that recognizes their change in life focus and changes in occupational needs and demands?
2. Do occupational well-being models need to be modified for special populations like older, retired adults, based on their altered sense of doing and being in retirement?

### **References**

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

## **OCCUPATIONAL THERAPY'S ROLE USING COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA (CBT-I) TO TREAT COLLEGE VETERANS**

Natalie R Rolle, *Colorado State University*

Aaron M Eakman, *Colorado State University*

Kimberly L Henry, *Colorado State University*

### **Abstract**

**Statement of Purpose:** Occupational therapy (OT) has an impact on daily occupations including work, play, school, and sleep. Sleep in and of itself is critical to health, and the consequences of poor sleep are multifaceted and can include fatigue, impaired memory, decreased mood and motivation, error proneness, and decreased school and work performance (Manber & Carney, 2015). OT has identified sleep as an essential aspect of daily life for which services may be warranted (Green & Brown, 2015), and there is a great need to expand understanding of sleep-related interventions in OT and occupational science. For Veterans, sleep disturbances are an all too common sequela of stressors associated with training, deployment, and combat. Many military personnel have returned with traumatic brain injury, posttraumatic stress disorder,

depression, pain, and anxiety, which commonly co-occur with chronic insomnia (Troxel et al., 2015). Cognitive behavioral therapy for insomnia (CBTI) is effective at reducing chronic insomnia, including populations with comorbid conditions (e.g. posttraumatic stress and depression). Unfortunately, there is a lack of professionals qualified to deliver CBTI (Manber et al., 2012) and OTs trained in this area are needed to address the occupation of sleep. Such work could help to identify the complex nature with which sleep disturbances impact engagement in day-to-day occupations.

**Description of Methods:** Primary analysis of a non-controlled before-after pilot and feasibility study of an 8-week multicomponent CBTI program for Veterans called Restoring Effective Sleep Tranquility (REST) program delivered by occupational therapists with advanced training in CBTI. Treatment included a combination of stimulus control therapy, sleep restriction therapy, psycho-education, and sleep hygiene (Eakman, et al., 2017).

**Report of Results:** Outcomes of the pilot study (N = 8) demonstrated statistically significant improvements in insomnia symptom severity (d = 1.82, p = .02), nightmares (d = .73, p = .02), fewer dysfunctional sleep beliefs (d = 2.2, p = .01), and greater social role participation (d = .69, p = .03).

**Implications Related to Occupational Science:** Present findings indicate an OT-led CBTI program for Veterans in college can reduce insomnia symptom severity, nightmares, and dysfunctional sleep beliefs. Reduced insomnia symptom severity was associated with improved social role participation. As an emerging area of practice, OTs can safely administer CBTI given they have received adequate training. OT treatment of insomnia using CBTI can lead to a better understanding of how sleep-related challenges affect individuals' ability to participate in occupations central to social roles, routines, and habits. OTs can reduce symptoms of chronic insomnia thereby positively influencing sleep - an occupation foundational to human health and well-being (Green and Brown, 2015).

### **Questions for Discussion**

1. What are biological, psychological, social, and occupation-centered reasons why individuals experience chronic insomnia?
2. Why is sleep important to address in occupational science & OT?
3. How can an OT-delivered CBTI intervention inform understandings of day-to-day occupations?

### **References**

Eakman, A.M., Schmid, A.A., Henry, K.L., Rolle, N.R., Schelly, C., Pott, C.E., & Burns, J.E. (2017). Restoring Effective Sleep Tranquility (REST): A feasibility and pilot study. *British Journal of Occupational Therapy*, 80(6), 350-360. doi:10.1177/0308022617691538

Green A. and Brown C. (2015) *An occupational therapist's guide to sleep and sleep problems*, London, England: Jessica Kingsley Publishers.

Manber R. and Carney C.E. (2015) *Treatment plans and interventions for insomnia: A case formulation approach*, New York, NY: The Guilford Press.

Manber R., Carney C.E., Edinger J.D., et al. (2012) Dissemination of CBTI to the non-sleep specialist: Protocol development and training issues. *Journal of Clinical Sleep Medicine* 8: 209-218. doi: 10.5664/jcsm.1786

Troxel W.M., Shih R.A., Pedersen E., et al. (2015) *Sleep in the military: Promoting healthy sleep among U.S. servicemembers*. Santa Monica, CA: RAND Corporation.

## **OCCUPATIONAL THERAPY INTERVENTIONS TO IMPROVE CLIENTS' QUALITY, QUANTITY OF SLEEP AND OCCUPATIONAL PERFORMANCE AFTER FAST TRACK JOINT REPLACEMENT SURGERY**

Manisha P Sheth, *Boston University*

### **Abstract**

**Background:** Sleep problems, inadequate sleep duration, poor sleep quality, poor sleep timing and sleep disorders are important public health problems that impact over 70 million persons in the USA and lead to an 11- 20% increase in health care costs.<sup>1</sup> By addressing sleep, as well as related routines and habits, occupational therapy practitioners can enhance the effectiveness of rehabilitation, promote health and well-being, and increase engagement and life quality.<sup>2</sup>

**Purpose:** Sleep and rest are recognized as core occupations in the Occupational Therapy Practice Framework: Domain & Process. Rest, sleep preparation and sleep participation are occupations known to be intrinsic to the process of obtaining restorative rest and sleep, which supports healthy, active engagement in other occupations.<sup>3</sup> Occupational therapists use knowledge of sleep physiology, sleep disorders, and evidence-based sleep promotion practices to evaluate and address the functional ramifications of sleep insufficiency or sleep disorders with regard to occupational performance and participation.<sup>4</sup>

One of the most recurrent complaints after total joint replacement is difficulty sleeping. The “stress response” to surgery, combined with personal and environmental factors, can affect quality and quantity of sleep in the hospital setting.<sup>5</sup> Failure to address factors that restrict participation in sleep in acute care could constitute a form of occupational injustice.<sup>6</sup> In response to this need, the author designed and carried out a non-randomized controlled study to evaluate the effectiveness of a non-pharmacological occupational therapy intervention to improve occupational performance in the area of sleep in clients who underwent fast-track hip and knee replacement surgery in the acute care hospital.

**Method:** A quasi-experimental design was used to compare the quality and quantity of sleep and activities of daily living performance of 76 clients (n=76) assigned to intervention and control conditions. The dependent variable of quality of sleep was measured using the Richard Campbell Sleep Questionnaire (RCSQ)<sup>7</sup>, quantity of sleep was measured via self-reported duration of sleep (SRDS), and activities of daily living was measured using Functional Independence Measure (FIM) scores.<sup>8</sup> Data collection was carried out three times; Time 1 took place 2-3 weeks before surgery, Time 2 on the day of discharge after the surgery, and Time 3 took place 2 weeks after

the surgery. Occupation based intervention included recommendations to modify clients' daytime routines (personal factors) such as diet, physical activities and nap time and to modify the night time routine (environmental factors) such as reduction in light and noise exposure at bedtime and maintaining a temperature between 60-70°F in the hospital room.

**Data Analysis:** Data were tested for normal distribution and significant outliers. Descriptive statistics, namely means and standard deviations, were obtained for the characteristics of the control and experimental groups, and then chi-square and t-test analysis was used to establish statistical similarity. Student T testing and one-way analysis of variance (ANOVA) were calculated to determine if there were significant differences in the RCSQ, SRDS and FIM scores between the two groups at Time 1, Time 2, and Time 3.

**Results:** At an alpha level of  $p = 0.05$ , there were significant differences between groups for the RCSQ and SRDS scores on the day of discharge (Time 2). The intervention group showed significant improvement in the quality and quantity of sleep; however, the FIM scores on the day of discharge did not show a significant difference between the two groups.

**Conclusion:** The results of this study demonstrated that improvement in sleep quality and quantity can be achieved in clients who receive an occupation-based intervention. More research examining the effectiveness of the non-pharmacological intervention with other surgical and medical populations in the hospital and the persistence of learned sleep hygiene practices over time after discharge from the hospital is warranted.

The influence sleep has on general health and well-being necessitates addressing it in client populations throughout the lifespan. Occupational therapy practitioners and their clinics and departments can take a variety of steps to enhance awareness of the importance of sleep and incorporate sleep-related considerations into practice. As we move forward, it will be important to prioritize research efforts targeting sleep assessments that meet our clinical needs and to establish an evidence base for treatment interventions aimed at fostering the rehabilitation process, enhancing participation, and improving life quality and satisfaction for our clients.<sup>2</sup>

**Key words:** Sleep, Core Occupation, Fast Track Joint Replacement Surgery

### **Questions for Discussion**

1. Will the participants of the presentation
2. Understand the impact of sleep deprivation on the clients' physical functioning and Activities of Daily Living (ADL) performance?
3. Identify at least three internal (intrinsic) and external (extrinsic) factors, which can impact sleep in the fast track joint replacement surgical clients?
4. Apply the knowledge of occupation-based interventions on sleep dysfunction in their personal area of practice?

### **References**

Otte, J., Davis, L., Carpenter, J., Krier, C., Skaar, T., Rand, K., et al. (2016, May 04). Sleep Disorder in Breast Cancer Survivors. Springer-Verlag . Berlin, Heidelberg.

Tester, N., & Jackson Foss, J. (2018). The issue is-Sleep as an occupational need. *American Journal of Occupational Therapy*, 72, 7201347010. doi: 10.5014/ajot.2018.020651.

American Occupational Therapy Association. (2014). Occupational Therapy Practice Framework: Domain & Process. *American Journal of Occupational Therapy*, 68 (Suppl. 1) , S1-S48.

AOTA. (2016, n.d.). Occupational therapy's role in sleep. Retrieved from <http://www.aota.org/about-occupational-therapy/professionals/hw/sleep.aspx>

Krenk, L., Jennum, P., & Kehlet, H. (2012). Sleep disturbances after fast-track hip and knee arthroplasty. *British Journal Of Anaesthesia* , 109 (5), 769-775. <https://doi.org/10.1093/bja/aes252>

Durocher, E., Gibson , B., & Rappolt, S. (2014). Occupational justice: A conceptual review. *Journal of Occupational Science* , 21, 418-430. doi:10.1080/14427591.2013.775692

Kamdar B, S. P. (2012). Patient-nurse interrater reliability and agreement of the Richards-Campbell sleep questionnaire. *American Journal Of Critical Care* , 21 (4), 261-269. doi:10.4037/ajcc2012111

Uniform Data System for Medical Rehabilitation. (1993). Guide to the Uniform Dataset for Medical Rehab (Adult FIM) Version 4.0. Buffalo, NY, USA. Retrieved from Uniform Data System for Medical Research: [http://www.udsmr.org/WebModules/FIM/Fim\\_About.aspx](http://www.udsmr.org/WebModules/FIM/Fim_About.aspx)

## **REST AS AN OCCUPATION: A HISTORICAL REVIEW OF REST IN THE OCCUPATIONAL THERAPY LITERATURE**

Kathlyn L Reed, *Texas Woman's University - Houston*

### **Abstract**

**Statement of Purpose:** Explore how the concept of rest appeared in the early literature of occupational therapy from the years 1905-1921 before the Archives of Occupational Therapy began publishing using an editorial review board.

**Methodology:** Literature (203 articles) previously identified by the author as relevant to occupational therapy theory and practice was reviewed for the concept of "rest" as an occupation. Use of rest as a comment such as "rest assured" or "rest my soul" was eliminated.

**Results:** Statements from 16 different authors, four diagnoses, and eight meanings were identified. Dr. Herbert Hall (1905) discussed rest most often in his articles. he proposed that rest should be alternated with periods of work (productivity) for people with neurasthenia (stress disorder) and other mental disorders. As the client improved in functional ability, the periods of work increased and periods of rest decreased. Authors writing about the care of clients with

tuberculosis outline a program of complete rest upon initial diagnosis followed by carefully supervised periods of occupation and rest until the client was discharged (Bellis, 1920). Authors concerned with heart disease focused on the need to balance participation in all occupations with rest periods to avoid over fatigue (Robinson, 1919). Those with chronic muscle weakness needed to rest to restore muscle tone before reengaging in occupation (Swaim, 1921). A general theme was the belief that a better quality of rest could be obtained when the the client participated in "properly selected" occupation which might range from sitting in chair or simply walking to several hours of recreation, exercise, or work related activities. Meanings identified included rest as a healing or curative agent, as one aspect of a medical management plan, as a means to promote and maintain health and wellness, as part of daily activity plan, as part of a time management program, as part of a balanced lifestyle, as a contributor to life satisfaction and quality of life and as a type or category of occupation in its own right.

Conclusion: The concept of rest has been a valued part of the occupational therapy literature from the early years

### **Questions for Discussion**

1. Are we teaching the value of rest as an occupation in the educational curriculum today? If so, in what contexts?
2. How can the occupation of rest be incorporated into lifestyle redesign programs?
3. Can occupational scientists develop better client education materials to suggest to people how attending to the occupation of rest could improve their quality of life?

### **References**

Bellis, G.L. (1920). The value of occupational therapy in tuberculosis sanatoria from a medical administrative standpoint. *Journal of the Outdoor Life*, 17(9), 221-238.

Dunton, W.R. Jr. (1913) Occupation as a therapeutic measure. *Medical Record*, 83(9), 388-389.

Hall, H.J. (1905). The systematic use of work as a remedy in neurasthenia dn allied conditions. *Boston Medical and Surgical Journal*, 152(2), 29-31.

Robinson, G.C. (1919). Occupational therapy in the treatment of heart disease. In: *Proceedings of the 2nd annual meeting of the National Society for the Promotion of Occupational Therapy*, pp. 42-44. Towson, MD: The Society.

Swaim, L.T. (1921). The relation of occupational therapy to chronic disease. *Modern Hospital*, 17(2), 162, 164, 166, 168.

## **THE ART OF TRANSITIONING: OCCUPATIONAL NEEDS AND PERSPECTIVES OF TWO TRANSWOMEN**

Mariana D'Amico, *Nova Southeastern University-Tampa*

Elizabeth Schuster, *Nova Southeastern University-Tampa*



## **Abstract**

Statement of purpose: Explore the occupational needs of the transgender population before, during, and after the transition process. Transwomen are birthed as male gender persons who've transitioned to their identified female gender and transmen are female at birth and transition to the male gender (Coleman, Bockting, Botzer, Cohen-Kettenis, DeCuypere, Feldman & Zucker, 2012). The transition process has multiple challenges prior to, during, and post the transition process. Occupational identity, roles, competence, sexual activity, and quality of life are challenged by moving from one gender to another requiring new learning, adaptation and overcoming barriers (Bar, Jarus, Wada, Rechtman, & Noy, 2016; Beagan, DeSouza, Gdbout, Hamilton, MacLeod, Paynter & Tobin, 2012; Galupo, Henise & Mercer, 2016). Completing the physiological change to one's identified gender through gender reassignment surgery is not an option that all transitioning persons desire or can achieve making sexual engagement more complex (Beagan, et al., 2012; Galupo, Henise, & Mercer, 2016).

Description of methods: This was an ethnographic study with purposive sampling. Two transwomen, participated in this conversation. One participant was known to one of the researchers. She recruited 3 other participants but only two persons participated. One woman identified as finished with her transition and had not selected gender reassignment surgery. The second woman was still in the process of transitioning with a goal of completion with gender reassignment surgery.

Data collection included digital recording of the focus group followed by verbatim transcription of this recording. Questions were related to self-care, community integration and relationships. Data analysis included coding and categorizing content of transcripts followed by analysis for themes. Themes emerged related to occupations, relationships, and identity.

Report of results: Findings included identification of unique occupations and concerns related to activities of daily living, sexual activity, relationships, community engagement, and social participation that occur as a result of transitioning to one's identified gender. Doing, being, belonging and becoming one's full self requires meeting occupational challenges, making adaptations, and finding supports to sustain health, wellness and participation in all aspects of life (Beagan, et al. 2012).

Implications related to Occupational science: The process of transitioning from one's birth gender to one's identified gender is fraught with new occupational learning in the process of becoming, belonging, doing and being a vibrant whole person. Transitioning genders opens the discussion for occupational justice of community integration and acceptance and the acquisition of new gender-based roles and occupations.

Key words: Transwomen, Occupation, Wellness

## **Questions for Discussion**

1. What other perspectives are needed to determine occupational justice and challenges to for transwomen and transmen in society?
2. What are the unique occupations of transmen (F->M) and are there differences for community integration and acceptance for transmen vs. transwomen?
3. Where and how does one learn new occupations associated with transitioning genders?

4. What are the psychosocial challenges of fulfilling one's occupational identify?

## References

- Bar, M. A., Jarus, T., Wada, M., Rechtman, L., & Noy, E. (2016). Male-to-female transitions: Implication for occupational performance, health, and life satisfaction. *Canadian Journal of Occupational Therapy*, 83 (2), 72-82. <https://doi.org/10.1177/0008417416635346>
- Beagan, B. L., De Souza, L., Godbout, C., Hamilton, L., MacLeod, J., Paynter, E., & Tobin, A. (2012). "This is the Biggest Thing You'll Ever Do in Your Life": Exploring the Occupations of Transgendered People. *Journal of Occupational Science*, 19(3), 226-240. DOI: 10.1080/14427591.2012.659169
- Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people. *International Journal of Transgenderedism*. 13 (4), 165–232.
- Galupo, M. P., Henise, S. B., & Mercer, N. L. (2016). "The labels don't work very well": Transgender individuals' conceptualizations of sexual orientation and sexual identity. *International Journal of Transgenderism*, 17(2), 93-104.

## THE OCCUPATION OF SLEEP IN CHILDREN WITH SENSORY MODULATION DISORDERS

Geela Spira, *Eastern Kentucky University*

Eyal Ben Mair, *Sheba Medical Center, Tel Aviv, Israel*

Miriam Botzer, *Ziv Medical Center, Safed, Israel*

Celia Kozocov, *Ziv Medical Center, Safed, Israel*

Dalia Schechter, *Sheba Medical Center, Tel Aviv, Israel*

## Abstract

Sleep and rest was recognized as a domain of occupation in the Occupational Therapy Practice Framework (OTPF) only in 2008 (AOTA). Adolph Meyer considered the balance of rest and activity as essential to health. He even considered sleep and rest as separate variables which comprised two of his 'big four' rhythms: work, play, rest, and sleep. (p. 6). As Occupational Therapy moved away from a holistic model of health towards a medical model (Cole & Tufano, 2008), sleep was largely forgotten. Even as the occupation-based models began to appear in the mid- 1990s, sleep was not considered as a major component. In the 2000s, occupational scientists had begun to consider sleep and sleep preparation in its research (Eakman et al, 2017; Fogelberg, 2017; Gallew & Mu, 2004). However, these initial studies tended to focus on adult populations. Recently, research on typical sleep patterns in both infants and adolescence has

begun to emerge (Folzik & Brown, 2018; Vasak et al, 2015). This research is the first study to investigate sleep patterns in children aged 5-11, and is also the first study to compare sleep patterns of children with Sensory Modulation Disorder (SMD) with typically developing children, noting how their sleep is disrupted. Parents of 105 healthy children and 84 children with sensory difficulties aged 5-11 years completed questionnaires reporting on sleep behaviors and sensory processing. The sensory profile was assessed using the Short Sensory Profile (SSP). Sleep behaviors were evaluated using the Children's Sleep Habits Questionnaire (CSHQ). Significant correlations were found between the total scores of sleep and sensory constructs. Among different sensory modalities, tactile sensitivity and auditory filtering were significant predictors for 29% of the variance,  $F=$  ,  $p < .005$ . Among different sleep modalities, bedtime resistance, parasomnias and daytime sleepiness were significant predictors for 30% of the variance,  $F=$  ,  $p < .005$ . Occupational scientists may now consider how bedtime resistance/ delayed sleep onset noted by children with SMD may affect bedtime routines and sleep hygiene, how noted night awakenings and partial awakenings such as parasomnias of night terrors or sleepwalking may affect the child's quality of sleep, and how noted daytime sleepiness may impact a child's day to day participation in valued activities.

### **Questions for Discussion**

1. Behavioral occupations of sleep can be divided into : Preparation for sleeping, Maintaining a sleep state, and Rousing from sleep/ day wakefulness. Discuss what types of sub- occupations of sleep can be found within these categorizations.
2. Inter-connections are found between behavioral sleep issues and sensory modulation issues, as noted in this poster. What implications do these interconnections seem to have on the manner in which these children perform daily occupations?
3. What might be the effect on the daytime occupations of children with sleep difficulties at night time?
4. How might Occupational Scientists view the successful execution of sleep occupations vs. the quality of performance of sleep occupations in children? Is there a difference?
5. How can beliefs about sleep influence how parents view or manage disturbed sleep in their children?

### **References**

- Foitzik, K. & Brown, T. (2018). Relationship between sensory processing and sleep in typically developing children. *American Journal of Occupational Therapy*, 72(1), 1-9. <https://doi.org/10.5014/ajot.2018.027524>
- Koenig, K. P., & Rudney, S. G. (2010). Performance challenges for children and adolescents with difficulty processing and integrating sensory information: A systematic review. *American Journal of Occupational Therapy*, 64(3), 430- 442. <http://dx.doi.org/10.5014/ajot.2010.09073>
- Scharf, R. J., Demmer, R. T., Silver, E. J., & Stein, R. K. (2013). Nighttime sleep duration and externalizing behaviors of preschool children. *Journal of Developmental and Behavioral Pediatrics*, 34(6), 384-391.
- Shani-Adir, A., Rozenman, D., Kessel, A., & Engel-Yeger, B. (2009). The relationship between sensory hypersensitivity and sleep quality of children with atopic dermatitis. *Pediatric*

Dermatology, 26(2), 143-149. <http://dx.doi.org/10.1111/j.1525-1470.2009.00904.x> Shochat, Tzischinsky, & Engel-Yeger, (2009).

Vasak, M., Williamson, J., Garden, J., & Zwicker, J. G. (2015). Sensory Processing and Sleep in Typically Developing Infants and Toddlers. *American Journal of Occupational Therapy*, 69(4), 1-8.

## **FRIDAY, OCTOBER 12**

### **MORNING SESSION**

#### **REFRAMING SLEEP: AN OCCUPATIONAL SCIENCE PERSPECTIVE**

Sarah Hernandez, *Nova Southeastern University*

#### **Abstract**

**Intent:** Adolf Meyer considered sleep one of four factors needed to balance to maintain personal health; sleep was given a role of primary importance along with work, play, and rest (Green, 2008). Sleep is considered an occupation by the American Occupational Therapy Association (2017), but the literature to support evidence-based practice on sleep is almost barren. Although researchers and clinicians acknowledge the importance of sleep patterns and engagement, few engage in holistic intervention approaches addressing sleep.

**Argument:** By reexamining current literature with an occupational science lens, researchers and clinicians may grow in confidence and competence in their involvement with sleep as an occupation. Occupational science could help reframe and reorganize intervention to first consider sleep as an occupation and clients as the agents of change. One such way is to examine sleep interventions across multiple populations and reconsider them with an occupational science perspective. These populations include individuals with sensory processing challenges (Foitzik & Brown, 2018); individuals with autism (Weaver, 2015); older adults who engage in daytime napping (Leland et al., 2016); individuals who are employed in nighttime shift work (Angerer, Schmook, Elfantel, & Li, 2017); and individuals who experienced a stroke (Wolf, Chuh, Floyd, McInnis, & Williams, 2015).

**Importance to occupational science:** By using occupational science themes such as meaning, place, spirituality, and health to fully define occupation, professionals can reclaim the importance of occupation-based intervention and demonstrate the therapeutic value of occupation worldwide. When therapists use occupational science as a spotlight on occupation, it reinforces the true essence of a client-centered approach to occupational engagement, occupational balance, and overall well-being.

#### **Questions for Discussion**

1. How does using the tenets of occupational science as a framework enhance existing occupational literature on sleep?
2. How could researchers use the core concepts of occupational science to design occupation-based sleep interventions?
3. How could clinicians enhance their practice by addressing sleep as a primary occupation?

## References

Angerer, P., Schmook, R., Elfantel, I., Li, J. (2017). Night work and the risk of depression: A systematic review. *Institute of Occupational and Social Medicine*, 114, 404-411. doi: 10.3238/arztebl.2017. 0404

Foitzik, K., & Brown, T. (2018). Relationship between sensory processing and sleep in typically developing children. *American Journal of Occupational Therapy*, 72(1), 7201195040-1. doi:10.5014/ajot.2018.027524

Leland, N.E., Fogelberg, D., Sleight, A., Mallinson, T., Vigen, C., Blanchard, J., . . . Clark, F. (2016). Napping and nighttime sleep: Findings from an occupation-based intervention. *American Journal of Occupational Therapy*, 70(4), 1-7. doi:10.5014/ajot.2016.017657

Weaver, L. L. (2015). Effectiveness of work, activities of daily living, education, and sleep intervention for people with autism spectrum disorder: A systematic review. *American Journal of Occupational Therapy*, 69(5), 1-11. doi:10.5014/ajot.2015.017962

Wolf, T. J., Chuh, A., Floyd, T., McInnis, K., & Williams, E. (2015). Effectiveness of occupation-based interventions to improve areas of occupation and social participation after stroke: an evidence-based review. *American Journal of Occupational Therapy*, 69(1), 1-11. doi:10.5014/ajot.2015.0121

## OCCUPATIONAL AESTHETICS AND THE AESTHETICS OF REST AND SLEEP

Kyle E Karen, *Texas Woman's University*

### Abstract

Argument: Occupational aesthetics is a theory explaining the effect of the aesthetic response on engagement in occupation. The notion that the aesthetic response is an inherent component of occupational engagement appeared in the first manual of instruction for occupational therapy practitioners written by Susan Elizabeth Tracy in 1912. Tracy, and many of the founding members of occupational therapy, were followers of the educator and philosopher John Dewey. Since Tracy's time, the concept of "natural tastes" as a client factor in intervention disappeared from clinical teaching, but Dewey's philosophy of the aesthetics of living, and occupation as a source of aesthetic experience, continue to engage the interest of occupational science (Cutchin, 2013). Our innate aesthetic response to everyday experience is shaped by our culture, our biology, our experiences, and is closely related to our identities; Our aesthetic response to environmental stimuli prompts us to act (Saito, 2007). An aversive aesthetic response disrupts

rest and sleep -- invasive light, buzzing mosquito, or crumbs between the sheets rouse us to wakefulness, while aesthetically pleasing sounds and sensations soothe us to sleep. Sleep is an occupation important to our health, wellness and functional performance. Caregivers fulfilling their role are invested in the sleep of others. Aesthetic engagement in occupation plays a role for caregivers, too. What is more beautiful to the caregiver of a young child than the sight of that child sleeping peacefully? A sleeping child is a satisfying affirmation of caregiving skill. A wakeful, fussing child is a source of stress and anxiety. Neuroaesthetic research identifies aesthetic experience as "an emergent property of the interaction of the sensory-motor, emotion-valuation, and knowledge-meaning neural systems" (Chatterjee & Vartanian, p. 178, 2016). Additionally, "aesthetic experiences activate the neural reward network" (Righi et al., p. 103, 2017). This is a reciprocal process prompting and shaping our engagement in occupation. Importance to occupational science: Cutchin's logic of occupation is linked with the individual's internal processes prompting and shaping engagement in occupation by the theory of occupational aesthetics.

Conclusion: Occupational aesthetics deepen engagement in - and add meaning to - daily occupations, including sleep.

### **Questions for Discussion**

1. Artists select meaningful subject matter from everyday life. What can artistic depictions of sleep tell us about the evolving yet enduring cultural meaning of sleep as an occupation?
2. How does the cultural meaning of sleep influence sleeping habits?
3. How might an individual's aesthetic sense influence sleep habits and the value they place on sleep?

### **References**

Cutchin, M. P. (2013) The art and science of occupation: Nature, inquiry, and the aesthetics of living, *Journal of Occupational Science*, 20(4), 286-297. doi:10.1080/14427591.2012.744290

Righi, S., Gronchi, G., Pierguidi, G., Messina, S., Viggiano, M. (2016). Aesthetic shapes our perception of everyday objects: An ERP study. *New Ideas in Psychology*, 47, 103-112. doi: <http://dx.doi.org/10.1016/j.newideapsych.2017.03.007>

Rolls, E.T. (2016). Neurobiological foundations of aesthetics and art. *New Ideas in Psychology*, 47, 121-135. doi: <http://dx.doi.org/10.1016/j.newideapsych.2017.03.005>

Saito, Y. (2007) *Everyday Aesthetics*[E-Reader]. OUP Oxford.

Saito, Y. (2017) *Aesthetics of the familiar: everyday life and world-making* [E-Reader]. OUP Oxford.

Tracy, S. E. (1912). *Studies in invalid occupation: A manual for nurses and attendants*, Second Printing [Digital version by Read Books 2009]. Whitcomb & Barrows, Boston.

### **A VITAL OCCUPATION: OBJECTS OF SLEEP**

Charlotte Royeen, *Rush University*

Lauren Little, *Rush University*

Lauren Adrian, *Rush University*

## **Abstract**

**Statement of Purpose:** Sleep is a vital occupation in which all people participate; however, many individuals struggle with sleep. During bedtime routines, individuals use different objects within their environment in the hours prior to participating in sleep; we have identified these important tools as objects of sleep. Occupational Science literature, however, has not investigated how everyday objects support or hinder individuals' participation in this daily occupation. Therefore, the purpose of this study is to identify common objects of sleep and their meaning among college students.

**Methods:** We will use mixed methods analysis consistent with Higgs (2001) and Creswell & Creswell (2017); specifically, graduate students (n=35) will photograph 5 objects of sleep in their sleep environments as well as describe the meaning of each object. We will then use a constant comparative analysis of the graphical representations of objects of sleep (Royeen, 2014) as well as a thematic analysis (Braun & Clark, 2006) of the narrative content of meaning. We will also use frequency counts with descriptive statistics to understand similarities across the data. Overall, this innovative methodology will allow us to gain an understanding of the ways in which objects of sleep support or hinder the everyday occupation among occupational therapy students.

**Results:** While data collection is underway, full analysis of all participant data will be complete by time of presentation.

**Implications:** Occupational Science is well positioned to inform sleep interventions among individuals with various conditions. Although objects of sleep have an effect on this everyday occupation among all people, research has yet to understand how we can use individuals' meanings associated with sleep to design and incorporate into intervention. The improvement in the occupation of sleep participation for individuals through objects of sleep analysis and intervention could further quality of life and everyday functioning.

## **Questions for Discussion**

1. How can we advance the study of objects as they pertain to everyday occupations through innovative methodological strategies?
2. With our current knowledge about the occupation of sleep, how can we use research on the objects of sleep to further characterize and advance the association between sleep and health?

## **References**

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Byrne-Armstrong, H., Higgs, J., & Horsfall, D. (2001). *Critical moments in qualitative research*. Butterworth-Heinemann Medical.

Royeen, C.B. (2014). In Search of Graphical Methods to Describe Morning Routines in Occupational Science. In Pierce, D. E. (Ed.). *Occupational science for occupational therapy* (pp. 67–77). Thorofare, NJ: Slack Incorporated.

## **CLAY HILLS STILL SPEAKING: THE UNTOLD STORY OF MID-CENTURY CALIFORNIA ARTIST GLEN LUKENS**

Michael McNulty, *University of Southern California*

### **Abstract**

The ceramic works produced by the award-winning artist Glen Lukens during the 1920s, '30s and '40s pioneered the craft's theoretical and practical attitudes towards the use of glaze and color. Lukens' influence upon 20th century West Coast ceramics endures today, but his crucial role in developing mid-century occupational therapy education has gone nearly unnoticed. This paper offers an unprecedented biographical sketch of a studio craftsman whose life's work in Ceramic Arts, in several uncanny ways, intersected with occupational therapy's own historical development and, in retrospect, values embedded in occupational science for helping others enact healthier and more fulfilling lives.

Born amongst Missouri's clay hills, Lukens studied ceramics at the School of the Art Institute in Chicago under its ceramics director Myrtle Merrit French in the early 1920's. French would later co-found the Hull-House Kilns, the pottery factory and school at Chicago's Hull-House. At the SAIC, Lukens used ceramics to teach classes for wounded World War I veterans as part of a government rehabilitation therapy program. He moved west to California to teach, and was recruited to join the University of Southern California in 1933, opening its ceramics department in 1936.

Conventional wisdom has long identified Margaret Rood as the founder of occupational therapy education at USC, the profession's first educational program in the West. However, it was under Lukens' direction that courses leading to an occupational therapy bachelor's degree — including a six-week ceramics course he taught — opened at USC in 1942, more than a year before Rood arrived at USC in 1943. An advocate for the therapeutic value of arts and crafts for wounded World War II veterans, Lukens remained somewhat involved with the curriculum and its students through the decade.



Whether with the New Deal's National Youth Administration, at the Manzanar Japanese-American concentration camp, or serving as UNESCO technical advisor for a public health mission to introduce kiln production in Haiti, "a strong social conscience kept Glen active" (Levin, 1984) through what would today be undoubtedly identified as community-based practices rooted in occupational justice. Lukens' sparse writings also reveal deeper themes about his perceptions of the relationship between craft and the experiences of time, place, identity and meaning. Although he died more than 50 years ago, Glen Lukens is a historical figure who deserves to be more broadly known and appreciated by contemporary occupational therapists and occupational scientists alike.

### **Questions for Discussion**

1. Occupational therapy and occupational science have long recognized the therapeutic and meaning-making potential of arts and crafts; discuss the significance of having those value claims be contemporaneously reciprocated by artists or craftspeople.
2. Discuss what occupational science has to learn from community-level, occupation-based practices that are intrinsic to arts and artists' communities.
3. Discuss the degree to which non-professional, transdisciplinary parties like Lukens can and/or should influence current and future trajectories of occupational science.

### **References**

Levin, E. (1982). *Glen Lukens: Pioneer of the vessel aesthetic*. Alhambra, CA: Cunningham Press.

Levin, E. (1984). *Glen Lukens 1987-1967: Slide presentation 72 slides* (Glen Lukens artist file). Elaine Levin Archive in American Ceramics, Helen Topping Architecture and Fine Arts Library, University of Southern California, Los Angeles, CA.

Levin, E. (2012). *AMOCA January 14, 2012: Gallery tour* (Glen Lukens artist file). Elaine Levin Archive in American Ceramics, Helen Topping Architecture and Fine Arts Library, University of Southern California, Los Angeles, CA.

Lynn, M. D. (2015). *American studio ceramics: Innovation and identity 1940 to 1979*. New Haven, CT: Yale University Press.

Lukens, G. (1936). The new craftsman. *Design*, 38(5), 37-40.

### **THE EXPERIENCE OF MEANINGFUL OCCUPATION IS A DIMENSION OF COMMUNITY REINTEGRATION WHICH CONTRIBUTES TO WELLBEING AMONG STUDENT SERVICE MEMBERS AND VETERANS**

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Aaron M. Eakman, *Colorado State University*

## Abstract

**Statement of Purpose:** We sought to understand whether a novel conception of community reintegration fostered student Service Members and Veterans' (SSM/V) wellbeing. Community reintegration is often operationalized in terms of the observable aspects (e.g., frequency) of participation in occupations which fulfill life roles following military service. However, positive subjective experiences (i.e., personal meanings) emergent from such participation promotes wellbeing, and should therefore be considered a dimension of community reintegration (Eakman & Eklund, 2012; Hemmingsson & Jonsson, 2005). We investigated whether personal meanings mediated the relationship between engagement in social and community-based occupation and psychological and subjective wellbeing. Results may inform efforts that target qualities of community reintegration most capable of fostering wellbeing.

**Method:** We employed an explanatory cross-sectional design on a sample of 427 SSM/V enrolled in college between 2013 and 2017. Online surveys generated responses to indicators reflecting community reintegration (social and community-based occupation; meaningful occupation) and other factors capable of promoting wellbeing (social support and coping skills; Eakman, Schelly, & Henry, 2016; Hawkins, McGuire, Linder, & Britt, 2015). Surveys also captured conditions which may decrease wellbeing: posttraumatic stress disorder [PTSD], depression, traumatic brain injury, and somatic symptoms. We employed a regression framework using procedures outlined by Hayes (2013) to test our hypotheses: the subjective sense of meaning will mediate the relationship between engagement in social and community-based occupation and both psychological (meaning in life) and subjective wellbeing (life satisfaction). We included the remaining factors listed above and demographic characteristics as covariates.

**Results:** The results supported our hypotheses. The models explained a statistically significant portion of variance in life meaning ( $R^2 = .38$ ,  $F(11,416) = 23.01$ ,  $p < .001$ ) and life satisfaction ( $R^2 = .47$ ,  $F(11,416) = 32.81$ ,  $p < .001$ ). There were significant total effects of engagement in social and community-based occupation upon life meaning (.06,  $SE = .03$ ,  $p = .05$ ) and life satisfaction (.09,  $SE = .03$ ,  $p < .01$ ), as mediated by meaningful occupation. The indirect effects of meaningful occupation upon life meaning (.06,  $SE = .01$ , 95% confidence interval [CI] = .03, .09) and life satisfaction (.06,  $SE = .01$ , 95% CI = .04, .09) were significant. The unmediated effects of social and community-based occupation upon life meaning and life satisfaction were not significant.

**Implications for Occupational Science:** Findings suggest that personal meanings associated with participation in occupations should be considered an important dimension of community reintegration among SSM/V, as it contributes to wellbeing.

**Key words:** Meaningful occupation; student Service Members and Veterans; community reintegration

## Questions for Discussion

1. What are the potential mechanisms by which a sense of meaningful occupation contributes to both psychological (meaning in life) and subjective wellbeing (life satisfaction)?

2. What are the implications of understanding the shared and unique qualities of both psychological and subjective wellbeing for inquiry aligned with occupational science?
3. This study reflects one contribution of an occupational science-based perspective to the study of community reintegration among Service Members and Veterans. What are some other ways that the study of community reintegration may benefit from applying an occupational science-based perspective?

## References

Eakman, A. M., & Eklund, M. (2012). The relative impact of personality traits, meaningful occupation and occupational value on meaning in life and life satisfaction. *Journal of Occupational Science*, 19(2), 165-177.

Eakman, A. M., Schelly, C., & Henry, K. L. (2016). Protective and vulnerability factors contributing to resilience in post-9/11 veterans with service-related injuries in postsecondary education. *American Journal of Occupational Therapy*, 70(1), 7001260010p7001260011-7001260010p7001260010.

Hawkins, B. L., McGuire, F. A., Linder, S. M., & Britt, T. W. (2015). Understanding contextual influences of community reintegration among injured servicemembers. *Journal of Rehabilitation Research & Development*, 52(5), 527-542.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

Hemmingsson, H., & Jonsson, H. (2005). The issue is—An occupational perspective on the concept of participation in the International Classification of Functioning, Disability and Health—some critical remarks. *American Journal of Occupational Therapy*, 59(5), 569-576.

## **DEVELOPMENT, VALIDITY, AND RELIABILITY OF THE MEANINGFUL AND PSYCHOLOGICALLY REWARDING OCCUPATION RATING SCALE (MPRORS)**

Moses N Ikiugu, *University of South Dakota*

Diana Feldhacker, *University of South Dakota*

Whitney Lucas-Molitor, *University of South Dakota*

## Abstract

Background: Although in occupational science it is well understood that participation in meaningful occupations is related to health and well-being, there is no clear protocol that is available to guide people in choosing optimally meaningful occupations in which to participate. Ikiugu, Hoyme, Mueller and Reinke (2016), and Ikiugu (2018) found that there are some differences between personally meaningful and psychologically rewarding occupations. They

concluded that health and wellbeing could be enhanced by individuals regularly participating in occupations that were both personally meaningful and psychologically rewarding.

**Purpose:** The purpose of this research study was to develop and investigate the convergent validity of the MPRORS, a new instrument that was developed to help individual identify personally meaningful and psychologically rewarding occupations so that they could incorporate these occupations in their daily routines. We developed the MPRORS items based on the characteristics that Ikiugu et al. (2016) and Ikiugu (2018) found to be characteristics of personally meaningful and psychologically rewarding occupations. For initial pilot validation of the instrument, 11 individuals who were students, faculty, and staff at a mid-Western public University participated in the study. Three assessments were administered to the study participants: the MPRORS, Meaningful Activity Participation Assessment (MAPA), and the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). Concurrent validity of the meaningful and psychologically rewarding scales of the MRPORS were determined by comparing them with the MAPA and WEMWBS respectively.

**Findings:** The internal consistency reliability (Cronbach's  $\alpha$ ) of the psychologically rewarding scale ranged between  $\alpha=.19$  (poor) and  $.96$  (very good), and that for the meaningfulness scale ranged between  $\alpha=.33$  and  $.94$ . The correlations among MAPA, WEMWBS, and MPRORS scores were not statistically significant.

**Conclusion.** The findings in this study indicated that the MPRORS had potential to be an instrument with acceptable internal consistency reliability. Lack of statistically significant correlations among the MPRORS, MAPA, and WEMWBS scores would suggest that the MPRORS lacks concurrent validity. However, given the small sample size ( $n=11$ ) further research is indicated before firm conclusions about the validity of the instrument can be drawn.

### **Questions for Discussion**

1. How does the MPRORS add to the AOTA Occupational Profile template?
2. How could the MPRORS be used to help people live occupational lifestyles that are optimally meaningful and psychologically rewarding?
3. What could be the next step in developing the MPRORS so that it becomes a valid and reliable, widely used instrument to facilitate participation in occupations that enhance health and well-being?

### **References**

Ikiugu, M. N. (In press). Meaningful and Psychologically Rewarding Occupations: Characteristics and Implications for Occupational Therapy Practice.

Ikiugu, M. N., Hoyme, A. K., Mueller, & Reinke, R. R. (2016). Difference between meaningful and psychologically rewarding occupations: Findings from two pilot studies. *Journal of Occupational Science*, 23(2), 266-277. doi: 10.1080/14427591.2015.1085431

**PANEL:**

**AN OCCUPATIONAL PERSPECTIVE ON RACIAL AND ETHNIC DISPARITIES IN SERVICE ACCESS AND USE: EXAMPLES FROM HEALTHCARE, EDUCATION, REHABILITATION, AND SOCIAL SERVICES**

Amber M. Angell, *University of Illinois at Chicago*

Lucía I. Floríndez, *University of Southern California*

Dominique Como, *University of Southern California*

Daniella Floríndez, *University of Southern California*

Connie Chu, *University of Southern California*

Khalilah R. Johnson, *Virginia Commonwealth University*

Ryan Lavalley, *University of North Carolina at Chapel Hill*

Rebecca M. Aldrich, *University of Southern California*

**Abstract**

This panel presents four papers on the topic of racial and ethnic disparities in access to and use of healthcare, education, rehabilitation, and social services in the United States.

**Purpose/Aims:** Building from Magasi’s (2012) argument that navigating social service systems is a ‘vital yet invisible’ occupation for marginalized groups, and Aldrich et al.’s (2017) analysis of ‘resource-seeking’ as an occupation of wider relevance, this panel asks: What is an occupational perspective on racial and ethnic disparities in access to and use of services?

**Methods:** This panel brings together diverse methodologies and theoretical perspectives to examine services disparities: 1) Ethnography with bilingual Latino families of children with autism; 2) Narrative interviews with Latino families of typically developing children and children with autism; 3) Secondary analysis of National Longitudinal Transition Study-2 (NLTS-2) data on transition-age youth with intellectual and developmental disabilities; and 4) Associated or communal experiences of occupation as a theoretical lens for understanding integration and service access of elder Latino immigrants at a senior center.

**Results:** 1) Latino parents experienced the occupation of navigating their children’s ASD services as central to their parenting role and identity, yet they faced access barriers across multiple systems at multiple levels (systems, community, family, individual). 2) Bilingual parents observed disparities in the quality of English- vs. Spanish-language ASD services and took on the occupations of advocate and navigator to support and educate monolingual Spanish-speaking parents; however, these occupations contributed to a burden of responsibility to address

systemic disparities at an individual level. 3) Quantitative analyses of NLTS-2 data indicated household education and socioeconomic status (SES) of racial and ethnic minority transitioning youth predict service use, suggesting the need to better understand and make visible the ways disability, race, and SES impact access and participation in select services. 4) Studying the formation of communities, including elder immigrant system negotiation and service seeking, can provide deeper insight into experiences of integration and service access in the context of diversifying communities.

Argument/Importance to OS: This panel reveals how racial and ethnic disparities place additional demands on the daily lives and occupations of service seekers from a range of marginalized groups. An occupational perspective on services disparities illuminates challenges and inequalities at multiple levels, with the potential for significant systemic and policy implications for underserved groups. As the discussion will illustrate, focusing on services disparities can also extend conceptualizations and applications of occupational justice.

### **Questions for Discussion**

Participants will:

1. Describe current knowledge about racial and ethnic disparities in service access and use in the U.S.
2. Describe how a critical occupational perspective illuminates racial and ethnic disparities in service access and use.
3. Identify the policy implications of research on system negotiation and resource seeking.
4. Explore topics for future occupational science research on racial and ethnic service disparities.

### **References**

Aldrich, R. M., Rudman, D. L., & Dickie, V. A. (2017). Resource seeking as occupation: A critical and empirical exploration. *American Journal of Occupational Therapy, 71*(3), 7103260010p1-7103260010p9. <https://doi.org/10.5014/ajot.2017.021782>

Angell, A. M., Solomon, O. (2017). "If I was a different ethnicity, would she treat me the same?": Latino parents' experiences obtaining autism services. *Disability & Society, 32*(8), 1142–1164. <https://doi.org/10.1080/09687599.2017.1339589>

Gary, K., Sima, A., Wehman, P., & Johnson, K. (in press). Transitioning racial/ethnic minorities with intellectual and developmental disabilities: Influence of socioeconomic status on related services. *Career Development and Transition for Exceptional Individuals*.

Magasi, S. (2012). Negotiating the social service systems: A vital yet frequently invisible occupation. *OTJR : Occupation, Participation and Health, 32*(Suppl 1), S25-33. <https://doi.org/10.3928/15394492-20110906-03>

Prodinger, B., & Turner, S. M. (2013). Using institutional ethnography to explore how social policies infiltrate into daily life. *Journal of Occupational Science, 20*(4), 357–369. <https://doi.org/10.1080/14427591.2013.808728>

# THE HISTORY OF RESTORATION IN THE SCIENCE OF OCCUPATION

Don Gordon, *University of Southern California*

## Abstract

**Intent:** The intention of this paper is to analyze the concept of restoration within the historical context of occupation. This will involve discussion and analysis of the prominent scientific theories of the early twentieth century and the restorative qualities of occupation.

**Argument:** The beginning of the twentieth century would provide the cultural backdrop for the birth of occupational therapy. What is less well understood that this time period represents the rise of science as a powerful element of Western culture (Burnham, 1987) with medical practices becoming increasingly linked to scientific methods in the late nineteenth and early twentieth centuries (Starr, 1982). The science of this time period was critical to the formation of the new profession of occupational therapy, which sought to investigate “the science of healing by occupation” (Gritzer and Arluke, 1985). Occupational science continues in this ongoing challenge to understand the science of occupation.

Restoration has also been of concern of the science of occupation since the early twentieth century (Gordon, 2002). This time marked the initial recognition of the psyche and the accompanying rise of psychotherapy in medical science. Theories were based upon models describing “nervous energy”, “nerve force” and the maintenance of “energy equilibrium” (James, 1899) with the cause of illness relating to the depletion of related reserves. Cure then focused on the means of restoration of these depleted reserves. The use of occupation as a curative measure marked a significant change in medical practices that had previously been dominated by the “rest-cure” and would ultimately be dominated by Freudian psychoanalysis or the “talking cure” (Gordon, 2002). This presentation will also reflect on how these concepts remain influential to this day.

**Importance to occupational science:** This topic is foundational to occupational science as a concept, providing an historical point of reference with which to understand discussions related to restoration.

**Conclusion:** Restoration has been a fundamental topic in the history of the science of occupation, and the understanding of this history provides an important context for current discussions.

**Key words:** Restoration, history

## Questions for Discussion

- 1) How have concepts relating to the restoration of mind and body continued to follow these early models?
- 2) What have we learned about restoration since that time?
- 3) Do we conceive of energy systems differently now?

## References

Burnham, J.C. (1987). *How superstition won and science lost: Popularizing science and health in the United States*. New Brunswick: Rutgers University Press.

Gordon, D. (2002). *Science and therapeutics in the history of occupational therapy*. Ph.D. dissertation, University of Southern California.

Gritzer, G., & Arluke, A. (1985). *The making of rehabilitation*. Berkeley: University of California press.

James, W. (1899). *On vital reserves. The energies of men: The gospel of relaxation*. New York: Henry Holt and Company.

Starr, P. (1982). *The social transformation of American medicine*. New York: Basic Books.

## **EXPLORING THE ROLE OF AFFECT WITHIN RESTORATIVE OCCUPATION: THE CONTRIBUTIONS OF DEWEY AND MASSUMI**

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### **Abstract**

**Intent:** The work of John Dewey and Brian Massumi is used to emphasize the pervasiveness of affect within occupation. To accomplish this task, current use of emotion theory within the occupational science literature is reviewed. Then the complementary theories of affect by Dewey and Massumi are discussed to argue that these respective theories taken together serve as ripe theoretical groundwork to further current understandings of affect in the discipline. Based on these complementary theories affect is comprised of both reflective emotions and pre-reflective affect (intensities). This perspective combines sociocultural and embodiment theories to situate affect as situationally dependent, historically motivated, and emergent over time. Throughout the paper, the role of affect within restorative and mundane occupations will be emphasized.

**Argument:** This paper argues that all occupation is undergirded by affect. Both intensities and emotional experiences serve to direct, modulate, or orient our action. Emotions push us towards and pull us away from occupations, but also are themselves pushed and pulled by occupations. Likewise, restoration is inextricable without understanding affect. Restoration is the movement from non-optimal emotional experiences (i.e., stress) towards more optimal experiences (i.e., calm). These transitions are laden with affect and failure to fully explore the role of affect within these processes will result in an incomplete picture of occupation. Despite frequent references to emotional experiences within occupational science literature regarding restorative and non-restorative occupations, affect remains largely under-theorized. The works of Dewey and Massumi provide a complementary theoretical groundwork to understand the processual nature of emotion and further emphasize the significance of emotion within all occupation.



Importance to Occupational Science: This paper provides a useful theoretical groundwork for considering the role of emotion within occupation. As occupational scientists explore areas such as restoration, balance, and resiliency, affect will likely be referenced frequently. This work invites those theorists to more fully explore the role of affect within these experiences. Further, this work invites a burgeoning group of occupational scientists to contribute to the rich field of emotion theory by connecting the role of affect within people's everyday doings.

Conclusion: Occupational science researchers frequently report emotions of their participants. However, there remains insufficient theory regarding the role of emotion within occupation. The theoretical developments of Dewey and Massumi highlight the contributions of intensities and emotion to occupational engagement. Occupational scientists should further explore the role of pre-reflective affect and emotion within future research.

Key words: Dewey, Massumi, emotion

### Questions for Discussion

1. How might occupational scientists begin to study the role of pre-reflective affect experiences within occupation?
2. Restoration, like all occupational performance, is processual in nature. How should occupational scientists research this process?
3. Taken for granted commonly used emotion words such as "happy" or "sad" are problematized in this thinking. How should occupational scientists begin to formulate new perspectives on affect not limited by the lexicon of our culture?

### References

Dewey, J. (2008). *The Early Works of John Dewey, Volume 4, 1882 - 1898: Early Essays and The Study of Ethics, A Syllabus*. (J. A. Boydston, Ed.) (1st ed.). Carbondale, Ill: Southern Illinois University Press.

Massumi, B. (1995). The autonomy of affect. *Cultural Critique*, (31), 83. doi:10.2307/1354446  
Stuart, S., Graham, C. D., & Butler, S. (2014). Doing more, feeling better: A behavioural approach to helping a woman overcome low mood and anxiety. *British Journal of Learning Disabilities*, 42(4), 328–335. doi:10.1111/bld.12101

Wright, J. J., Wright, S., Sadlo, G., & Stew, G. (2014a). A reversal theory exploration of flow process and the flow channel. *Journal of Occupational Science*, 21(2), 188–201. doi:10.1080/14427591.2012.713313

Zuzanek, J. (1998). Time use, time pressure, personal stress, mental health, and life satisfaction from a life cycle perspective. *Journal of Occupational Science*, 5(1), 26–39. doi:10.1080/14427591.1998.9686432

# REFLECTIVE DREAM WORK AS A PATHWAY TO RESTORATION

Patricia Gailey

Donna Eder

## Abstract

This theoretical paper uses an authentic case to illustrate the integration of meaning in occupation with physicist David Bohm's (1985) ideas about meaning and quantum mechanics. Building upon previous work by Gailey (2017), and on the experiences journaled by the second author, this presentation shows how quantum physics knowledge can be applied to an authentic situation. This application expands our understanding of the importance of the subtle aspects of human experience to the restorative process. Specifically, we use Bohm's theoretical concepts to track Eder's transformation from a state of dissatisfaction and exhaustion to one of full satisfaction and renewed energy through her use of reflective dream work.

Bohm (1985) proposed a subtle layer of quantum theory that explains the relations between what is significant (meaning, values, intention) and what is somatic (manifestation) in terms of energy flow, symbolized by a magnet. Bohm (1985) did not specify some of the dimensions frequently referred to in occupational literature (Hasselkus, 2002) nor the realm of the psyche (dreams, imagination, etc.) explored in spiritual literature (Hogan, 2001). Bohm's (1985) ideas, however, include an infinite number of unnamed dimensions enfolding into each other between the significant (spirit) and the somatic (body). Gailey (2017) links meaning and energy with multiple dimensions of occupation.

This presentation brings attention to concepts of the psyche, values, and spirit by focusing on dream work as critical to the process of uniting these key dimensions of meaning with cognitive, emotional, social, and physical dimensions. In our case illustration, which describes Eder's personal experience of disruption at work following her mother's ALS diagnosis and death, we show how reflective dream work provided a key role in restoring her productivity and overall sense of well-being and satisfaction. Prior to her dream work, there were no connecting links to allow the flow of energy from her spiritual dimension into her physical body and daily life. Giving attention to intermediary dimensions forged a path for the flow of energy from her spirit to manifestation in her life and work. This presentation demonstrates a need for occupational science to consider the restorative utility these subtle dimensions of human experience might hold for occupational therapy purposes.

Key words: restoration, reflective practice, meaning

## Questions for Discussion

1. Explore how attention to the subtle dimensions in the occupational therapy process can be facilitated.
2. What other reflective or non-reflective practices might tap these same areas of meaning?
3. What kind of obstacles might arise in applying these ideas to occupational therapy practice?

## References

Bohm, D. (1985). *Unfolding meaning: A weekend of dialogue*. New York, NY: Rutledge.

Eder, D. A natural unfolding. Manuscript in preparation.

Hasselkus, B. (2002). *The Meaning of Everyday Occupation*. Thorofare, NY: Slack, Inc.

Hogan, Linda (2001). *The Woman who Watches over the World*. New York: W. W. Norton and Company.

Gailey, P. (2017). The systems view of life: Undergirding and unifying three philosophies of occupation, *Journal of Occupational Science*, DOI: 10.1080/14427591.2017.1402810

## AFTERNOON SESSION 1

### RECASTING CURRICULUM TO ADDRESS CRITICAL SOCIAL AND HEALTH PROBLEMS CONFRONTING SOCIETY

Louise Farnworth, *Monash University, Australia*

Alana Hewitt, *Monash University, Australia*

Aislinn Lalor, *Monash University, Australia*

Lisa Murphy, *Monash University, Australia*

Ellie Fossey, *Monash University, Australia*

### Abstract

Intent: The central vision of founding occupational scientists was to “recast and reconstruct traditional” occupational therapy practice. With a solid foundation in occupational science principles, Clark et al. (1991) argued that occupational therapists are well positioned to address “critical social and health problems confronting society and, hence carve out new practice niches (p. 308). With a primary focus on the education of occupational therapists, this paper will argue that such education, embedded in occupational science, can develop practitioners who are arguably best able to meet these most critical social and health needs of our modern society.

Argument: Australia is facing an over supply of graduate occupational therapists in traditional areas of practice, in part as a consequence of growth in the number of universities offering occupational therapy programs. Simultaneously, the health and well-being needs of many people are not being met, as indicated by societal symptoms such as increased substance abuse, homelessness, imprisonment rates, while the financial and human costs of dealing with these issues are spiraling out of control.

The minimum standards for the education of occupational therapists have increasingly refocused on the expected outcomes of occupational therapy education to more closely resemble the practitioner envisaged by Clarke et al. (1991). For example, the 2016 WFOT standards declare that educational and professional values and beliefs focus on occupation as the central concept, support the view of humans as occupational beings; subscribe to the transactional relationships between the person, the occupation and the environment as the hub of practice.

This paper describes an Australian occupational therapy program that intentionally and explicitly incorporates learning activities that address occupational science concepts throughout the program. It culminates with all graduates completing an extensive, occupationally focused, community based project placement that contributes to the overall 1,000 hours of fieldwork required by WFOT. Examples of some of the projects completed and new practices created will be briefly discussed.

Importance to occupational science: The curriculum described, and projects completed, demonstrate how an expanded vision of occupational therapy practice can indeed lead to career possibilities in project management, population health, community development in new practice niches based on occupational science.

Conclusion: Occupational science underpins our understanding of the relationships between people and health to inform some of the most critical social and health problems confronting society. The knowledge and skills of occupational therapy, combined with occupational science, is the missing link to such practices.

### **Questions for Discussion**

1. How are academics in this program upskilled to be able to reinforce occupation based principles? What are the main challenges?
2. How relevant are WFOT minimum educational standards and national educational program accreditation in directing and supporting programs to be more occupationally focused?

### **References**

Clark, F. Parham, D., Carlson, M. Frank, G. Jackson, J., Pierce, D. .. Zemke, R. (1991). Occupational science: Academic innovation in the service of occupational therapy's future, *American Journal of Occupational therapy*, 45(4), 300-310.

Krishnagiri, S., Hooper, B., Price, P., Taff, S. D., & Bilics, A. (2017). Explicit or hidden? Exploring how occupation is taught in occupational therapy curricula in the United States. *American Journal of Occupational Therapy*, 71, 7102230020.  
<https://doi.org/10.5014/ajot.2017.024174>

WFOT (2016). *Minimum Standards for the education of Occupational therapists*, Revised 2016. World Federation of Occupational Therapists.

# USE OF AN ONLINE FRAMEWORK FOR TEACHING THEORETICAL CONCEPTS IN OCCUPATIONAL SCIENCE CURRICULUM: AN EXEMPLAR FROM AN AUSTRALIAN UNIVERSITY.

Lisa Murphy, *Monash University, Australia*

Aislinn Lalor, *Monash University, Australia*

Louise Farnworth, *Monash University, Australia*

Allie Ford, *Monash University, Australia*

## **Abstract**

**Introduction:** Occupational science is core within the occupational therapy curriculum at Monash University, taught at both undergraduate and graduate entry-levels. In the undergraduate curriculum, occupational science concepts have been taught in a traditional lecture / tutorial sequence since the program's inception; in the graduate-entry program a student-centred scenario-based learning (SBL) approach that emphasizes active and deep learning is used. Numerous institutional factors, along with a review of student participation and performance, has resulted in the need for curriculum redesign at both levels. The aim of this paper is to present an exemplar from an Australian University using an innovative, novel and locally developed online Framework that exposes learners to real-world practice issues and situations to teach foundational occupational science concepts and align with contemporary education practice.

**Discussion:** Integrating Science and Practice (iSAP) is a Framework that combines authentic, multimedia case studies with exposure to practitioner and expert voices, and student self-reflection. The closed-loop learning puts the onus on students to monitor their own performance, and identify knowledge gaps and strategies for practice. iSAP supports a flipped classroom approach to engaging students in pre-class, in-class and post-class learning activities. The iSAP Framework is already being used in several science-based disciplines within the Faculty, yet less is known about its use in other allied health curricula, particularly theoretical rather than clinical focused units. This paper will compare use of the iSAP framework with conventional instructional methods for teaching core theoretical concepts in introductory occupational science curriculum, including the design and development of scenario's and support material, methods of assessment and staff training. The strengths and limitations of using this method of instruction will be critiqued and discussed using the Four Dimensional Framework for Curriculum Development (Steketee, Lee, Moran & Rogers, 2013), and with reference to the Australian occupational therapy competency standards.

**Conclusion:** Multi-media cases could be used as triggers for introducing key occupational science concepts to entry-level occupational therapy students to better prepare learners for transitioning to clinical based units of study. Although relatively new in allied health curricula at Monash University, the iSAP, online, case-based learning approach offers scope for presenting occupational science concepts embedded in real-world scenarios to large student cohorts, using

an engaging, flipped classroom format, while also enhancing students' development of theoretical knowledge and reasoning skills.

Key words: Instructional methods, online learning, scenario-based learning

### **Questions for Discussion**

1. What is the effectiveness of using this online framework, compared with conventional instructional methods, for teaching core theoretical concepts in introductory occupational science curriculum (i.e., staff time, resources and infrastructure required for both development of scenarios and implementation of classes)?  
What are the strengths and limitations of utilizing a scenario-based approach for teaching occupational science concepts in entry-level occupational therapy curriculum?
2. What is the effectiveness of using this online framework, compared with conventional instructional methods, for teaching core theoretical concepts in introductory occupational science curriculum (i.e., staff time, resources and infrastructure required for both development of scenarios and implementation of classes)?
3. What are the strengths and limitations of utilizing a scenario-based approach for teaching occupational science concepts in entry-level occupational therapy curriculum?

### **References**

Steketee, C., Lee, A., Moran, M., & Rogers, G. (2013). Towards a theoretical framework for curriculum development in health professional education. *Focus on Health Professional Education*, 14 (3), 64-77.

Williams, I., Schlipf, K., Heinrich, L., & Baird, M. (2017). Integrating Science and Practice (iSAP): An interactive case-based clinical decision-making radiography training program. *MedEdPublish*, 1-11. Doi: 10.15694/mep.2017.00065

## **THREADING SLEEP THROUGH AN OCCUPATION-CENTERED CURRICULUM**

Nancy Bagatell, *University of North Carolina at Chapel Hill*

### **Abstract**

Intent: This presentation provides an example of how knowledge of the occupation of sleep can be threaded through an occupation-centered, entry-level occupational therapy curriculum.

Argument: In the early days of occupational therapy, sleep was acknowledged as an important occupation embedded in daily routines and fundamental to health and wellbeing. However, attention to sleep dwindled as the profession became more reductionistic and focused on function. With the inclusion of rest and sleep as an area of occupation in the Occupational Therapy Practice Framework (AOTA, 2008), there is now acknowledgment that sleep impacts occupational engagement and quality of life for all people throughout the life course. We believe that sleep, like other occupations, is complex and requires further attention in educational curricula. Sleep must be addressed explicitly so that occupational therapists are prepared to address sleep as an occupation. In this paper we describe how sleep can be threaded throughout a

curriculum to highlight the transaction of neurobiology, context, life course, and personal factors such as illness/injury. We present our rationale for how and when sleep is introduced in the curriculum and how basic knowledge of sleep and transacting factors builds as students progress through the program. The paper also introduces our teaching and learning strategies and our theoretical lens for understanding of sleep as an occupation. This intentional threading through the curriculum provides future occupational therapists with entry-level knowledge necessary to address sleep as an occupation.

**Importance to occupational science:** In occupational science, there have been calls to better understand the form, function, and meaning of occupation (Clark et al., 1991) and to study specific occupations in detail rather than solely focusing on the experience of occupation (Hocking, 2009). In occupational science there have also been calls to explore how occupation is taught and learned (Hocking, 2016). As Hocking (2016) suggested, openly discussing how occupational science informs occupational therapy education is an essential way to keep the discipline strong and vital.

**Conclusion:** Threading sleep through a curriculum provides a way for students to understand this occupation more deeply and prepares practitioners to address sleep as an important occupation for individuals through the life course.

**Key words:** sleep, education, occupational therapy

### **Questions for Discussion**

1. What other knowledge about sleep and rest should be included in all entry-level curricula?
2. What other pedagogies would be useful to use to educate students about sleep?
3. What other occupations could be threaded through a curriculum in a similar way?

### **References**

Clark, F., Parham, D., Carlson, M., Frank, G., Jackson, J., Pierce, D., Wolfe, R., & Zemke, R. (1991). Occupational Science: Academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy*, 45 (4), 300-310.

## **FAITH EXPERIENCES OF ADULTS WITH INTELLECTUAL DISABILITY**

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Caroline Hogan, *Midwestern University - Downers Grove*

Alexandria Barnard, *Midwestern University - Downers Grove*

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## **Abstract**

Statement of purpose: To explore the ways in which adults with intellectual disability (ID) experience and find meaning in occupations rooted in faith.

Description of methods: Researchers used a qualitative descriptive design for this study. Participants included adults with ID (Core Members) and staff (Assistants) who live together in the three group homes of L'Arche Chicago. L'Arche Chicago is an inter-religious community of people with and without intellectual disabilities who share their lives together in three shared homes. Data collected included: researchers' observations, authentic interactions with the participants, engagement in L'Arche community events, a focus group, and semi-structured interviews of Core Members and Assistants. The interviews and focus group were audiotaped and transcribed verbatim. Thematic analysis was used to examine patterns and themes that emerged from the data. Trustworthiness was established through researchers' communication, multiple data sources, extensive time spent in the field prior to and during data collection efforts, member checking, and multiple coders of the data.

Report of results: Participants included seven Core Members and 10 Assistants. Results from the data revealed the emergence of three themes: (a) Living the L'Arche way (refers to the kindness, care, and friendship that is evident throughout the community), (b) Prayer as occupation (the how, when, where, for what, and with whom Core Members pray), and (c) Faith routines support community (the structured ways in which individuals in the community participate and include faith in their daily lives).

Implications related to occupational science: This study addressed how individuals with ID participate in occupations that express their faith in their daily lives. Such occupations contribute to the temporal and social routines of adults with intellectual disability who live in the intentional L'Arche Chicago community. This study considered the meaningful occupations associated with faith from the perspective that the occupations of individuals with intellectual disability are, indeed, no different than those of other populations, although the ways in which they are enacted (e.g., within the L'Arche community, as co-occupations, etc.) may be different.

## **Questions for Discussion**

1. What are ways to elicit the symbolic and spiritual meanings of faith-based occupations with adults who have severe intellectual disability?
2. Wilcock has written of doing, being, becoming, and belonging. Given the focus on faith experiences, how might these elements be realized and interrelated with adults with varying levels of intellectual disability?

## **References**

Gaventa, B. (2012). From strangers to friends: A new testament call to community. *Journal of Religion, Disability and Health*, 16, 206-214. doi:10.1080/15228967.2012.673085

Sango, P. N., & Forrester-Jones, R. (2017). Intellectual and developmental disabilities, spirituality, and religion: A systematic review 1990-2015. *Journal of Disability and Religion*, 21(3), 280-295. doi:10.1080/23312521.2017.1317224 L



Watts, G. (2011). Intellectual disability and spiritual development. *Journal of Intellectual and Developmental Disability*, 36(4), 234-241. Doi: 10.3109/13668250.2011.617731

## **THE DEVELOPMENT OF A CONCEPTUAL MODEL OF COMMUNITY PARTICIPATION THAT INTEGRATES THE EXPERIENCES OF YOUNG ADULTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITY**

Molly Bathje, *Rush University*

Kristine Haertl, *Saint Catherine University*

### **Abstract**

Increasing numbers of persons with intellectual and developmental disability (IDD) live in community settings but despite their desire for participation, may not have full occupational participation in their communities (Gray et al., 2014, Kampert, & Goreczny, 2007). Occupational engagement in one's community is integral to health and wellness (World Health Organization, 2002); a pattern of occupational disengagement is an occupational justice issue. The lack of community engagement in adults with IDD has been attributed to individuals' characteristics, abilities, and their environmental determinants (Channon, 2014). Despite advances in understanding and measuring community participation for individuals with IDD, gaps in the literature still exist along with a need for a conceptual model of community participation of those with IDD. The authors completed a small qualitative study of four young adults with IDD and used semi-structured interviews to gain insight into individuals' daily experiences of community participation. Results of the qualitative study along with a literature review and expert review process resulted in the development of a conceptual model of community participation for young adults with IDD. The model asserts that occupation serves a fundamental purpose in the community engagement process, and that there is a transactional relationship between all of the model components, including between the individual and context. This presentation will discuss the results of the qualitative interview based study of participants with IDD and the development of a conceptual model of community participation. In addition, the model will be described and opportunities for application in practice and research will be discussed.

### **Questions for Discussion**

- 1) Describe the need for and conceptual model of community participation in young adults with IDD and the process by which one was developed.
- 2) Describe the components of a conceptual model of community participation for young adults with IDD.
- 3) Identify potential research opportunities and interventions associated with this model of community participation.

### **References**

Channon, A. (2014). Intellectual disability and activity engagement: Exploring the literature from an occupational perspective. *Journal of Occupational Science*, 21(4) 443-458. doi:10.1080/14427591.2013.829398

Gray, K. M., Piccinin, A., Keating, C. M., Taffe, J., Parmenter, R. R., Hofer, S., Einfled, S. L., & Tonge, B. J. (2014). Outcomes in young adulthood: are we achieving community participation and inclusion? *Journal of Intellectual Disability Research*, 58(8), 734-745. doi: 10.1111/jir.12069.

Kampert, A. & Goreczny, A. (2007). Community involvement and socialization among individuals with mental retardation. *Research in Developmental Disabilities*, 28, 278-286. doi: 10.1016/j.ridd.2005.09.004

World Health Organization. (2002). *Towards a common language for functioning, disability and Health: ICF*. Geneva, Switzerland: Author.

## **EXPLORING PARTICIPATION IN HEALTH-PROMOTING OCCUPATIONS FOR PEOPLE WITH INTELLECTUAL DISABILITIES THROUGH PHOTOVOICE**

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Elisabeth Hladik, *University of Wisconsin-Madison*

Holly Romaniak, *University of Wisconsin-Madison*

Karla Ausderau, *University of Wisconsin-Madison*

### **Abstract**

**Statement of Purpose:** Individuals with intellectual disability (ID) are at an increased risk for health disparities that serve as barriers to participation in daily occupations (Krahn & Fox, 2014). Understanding the lived experience of individuals with ID can illuminate barriers and facilitators to these health-promoting occupations. Commonly used methods examining health for individuals with ID may not reveal important information about their daily participation potentially due to cognitive or communication limitations (Chew KL, Iacono T, & Tracy J, 2009). Participatory action research including Photovoice is a viable alternative to meet their unique needs. Photovoice is a method potentially more accessible to individuals with more diverse communication or cognitive abilities, capable of providing robust visual data of the lived experience of individuals and allows for individuals to identify experienced barriers and facilitators to occupational participation and health (Hartman, Mandich, Magalhães, & Orchard, 2011). Therefore, the purpose of this study was to to access the lived experiences of individuals with ID through photovoice to understand their meaning of health, and participation in health-promoting occupations.

**Methods:** A photovoice method was used with necessary supports and adaptations to meet the needs of participants. Ten participants with ID completed between 4 and 7 sessions including a Photovoice orientation, 2-4 photo collection sessions, an individual interview, and a focus groups that included collective photo sharing. Participants were accompanied by research partners to provide assistance with technology, answer questions, and provide support with confidentiality

procedures. Participants were invited to complete member checking of the results at the conclusion of the analysis.

Results: Thematic analysis revealed three primary themes descriptive of participants definitions of health Personal Identity of Health, Nutrition, and Meaningful Occupation. In addition, analysis identified descriptions of barriers and facilitators to participation in health-promoting occupations. Participants held strengths-based definitions of health including a strong personal identity of being healthy. Five additional descriptive characteristics were identified as determinants of whether a described occupation was representative of health: Physical Activity, Responsibility, Social Engagement, Enjoyment, and Environment.

Implications: Visual data allowed participants to communicate additional depth and complexity of their participation and health as compared to narrative descriptions alone. Research methods may need to be adapted to be more accessible in order to study occupations and participation for all individuals. These findings could be used by the participants to advocate for community change including increased opportunities for participation in health-promoting occupations that are meaningful to individuals with ID.

### **Questions for Discussion**

1. How, as researchers, can we further expand methodology to allow for unique communication needs and cognitive abilities in order to better understand occupational participation for all individuals and promote occupational justice?
2. Individuals in this study provided strength-based definitions of health and participation. This conflicts with current literature highlighting limitations on their participation and their experience of health disparity. How can we build on their strength-based perceptions in order to promote increased access to occupations?
3. Photovoice and other participatory action methods are intended to be used to enact social change and promote the advocacy of vulnerable populations. How can the results of this study be for that purpose and what supports would be needed?
4. What is the responsibility of occupational scientists to promote inclusive and participatory methods?

### **References**

Chew KL, Iacono T, & Tracy J. (2009). Overcoming communication barriers - working with patients with intellectual disabilities. *Australian Family Physician*, 38(1/2), 10–14.

Hartman, L. R., Mandich, A., Magalhães, L., & Orchard, T. (2011). How Do We ‘See’ Occupations? An Examination of Visual Research Methodologies in the Study of Human Occupation. *Journal of Occupational Science*, 18(4), 292–305.  
<https://doi.org/10.1080/14427591.2011.610776>

Krahn, G. L., & Fox, M. H. (2014). Health Disparities of Adults with Intellectual Disabilities: What Do We Know? What Do We Do? *Journal of Applied Research in Intellectual Disabilities*, 27(5), 431–446. <https://doi.org/10.1111/jar.12067>

## **READY TO RUN, READY TO REST: ADDRESSING OCCUPATIONAL INJUSTICE THROUGH SENSORY INCLUSION**

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Leslie Riley, *University of North Carolina at Chapel Hill*

Palmyra Romeo, *University of North Carolina at Chapel Hill*

Karen Edwards, *University of North Carolina at Chapel Hill*

Antoine L Bailliard, *University of North Carolina at Chapel Hill*

### **Abstract**

**Intent:** Outdoor spaces are often designed for individuals with ‘typical’ sensory processing patterns. Individuals with sensory processing patterns that diverge from these norms are often excluded from participating fully in built outdoor spaces because those spaces often fail to accommodate for their diverse sensory needs. The intent of this presentation is to 1) present a blueprint for a space that is inclusive of people with diverse sensory processing patterns, and 2) argue how building environments that are inclusive of diverse sensory needs is an issue of occupational justice. The blueprint was produced during an ongoing consultative project with designers of a local state park.

**Argument:** Individuals experience the world differently based on diverse sensory needs and preferences. These experiences become ‘embodied’ ways of ‘making sense’ of the social and physical environment (Bailliard, Carroll & Dallman, 2017). The built environment and normative expectations for behavior are often barriers to participation for individuals with different sensory processing patterns and their families. We argue that occupational injustice occurs when environments are not constructed to accommodate for the diverse sensory needs exhibited by all populations. In this presentation, we will present a blueprint for an outdoor interactive sensory space that was developed in collaboration with community stakeholders and with review of sensory and design literature. To maximize inclusion, we designed a space with graded intensity of multi-sensory and modality-specific (e.g., auditory, tactile, or visual) sensory experiences to create a variety of sensory experiences ranging in intensity. Other design features include designated areas for rest and refuge and the provision of structured supports to guide participation and assist patrons in managing their sensory experiences as they visit the space.

**Importance to Occupational Science:** Occupational science has not sufficiently explored how sensory barriers and normative expectations for sensory experiences can prevent community engagement and participation. This presentation uses an empirical example to demonstrate how occupational justice can be promoted through the design of outdoor spaces that accommodate a diversity of sensory processing needs to support inclusive participation for all populations.

**Conclusion:** The built environment can present an insurmountable barrier for participation to individuals with diverse sensory needs or preferences and their families. Societal stigma against

‘sensory behaviors’ also discourages full participation. Occupational science must attend to sensory diversity in its endeavor to promote justice and inclusion.

Key words: sensory, inclusion, occupational justice

### **Questions for Discussion**

1. What knowledge of sensory processing can occupational scientists contribute to the design of the built environment to promote occupational justice?
2. How can a blueprint for an inclusive sensory play space be improved based on this knowledge?

### **References**

Bailliard, A. L., Carroll, A., & Dallman, A. R. (2017). The Inescapable Corporeality of Occupation: Integrating Merleau-Ponty into the Study of Occupation. *Journal of Occupational Science*, 1-12.

## **INTERDEPENDENCE IN FAMILY LIFE: OCCUPATIONAL SCIENCE PERSPECTIVES ON CAREGIVING AND RESTORATION**

Mary C Lawlor, *University of Southern California*

David Turnbull, *University of Southern California*

### **Abstract**

This presentation draws on ethnographic and narrative phenomenological (Mattingly, 2010) studies to examine how “real families” in “real life” provide caregiving, support desired developmental trajectories, and ensure engagements in restorative (Howell & Pierce, 2000) and health promoting activities. Particular attention will be given to the ways in which: 1) interdependency in family life both affords and constrains health promoting and restorative activities, 2) home, community, and institutional worlds (e.g., schools, clinics) intersect and contribute to the density of family life, 3) contexts for caregiving and restoration are constituted through actions and interactions often transcending the physical characteristics of the environment, and 4) moments of significant experiences in daily life relate to lives and health over time. Data exemplars will be drawn from two interdisciplinary primary studies (2R01 HD38878; R01 MH089474) that examined meanings of illness and disability in family life, health disparities in diagnoses and access, and sociocultural influences on daily life. A brief overview of study populations, design, multiple methods and measures to enhance rigor will be described. Both of these studies elicited emic perspectives (e.g., the perspectives of the people who are living with the phenomenon under study) which enables an analysis of how families represent the co-relatedness of strengths and vulnerabilities and their conceptualization of ways to engage in activities that promote restoration and provide opportunities for renewal. Discussion will also emphasize the lifestyle tradeoffs (Carandang & Pyatak, 2018) and dilemmas faced when desired developmental trajectories intersect in incommensurate ways. In addition,

consideration will be given to how our understandings of individuals and occupations morph when viewed through the lens of the interconnectedness of family life (Whiteford, 2007).

### **Questions for Discussion**

1. How does an examination of interdependency in family life contribute to new understandings of analytic units in occupational science research?
2. What new conceptualizations of occupations as joint endeavors emerge when restorative activities or occupations are viewed from a position of interconnectedness?
3. Will understandings of caregiving practices from an occupational science perspective generate more effective approaches for supporting health and well being in family life?
4. Does a family life perspective inform current considerations related to the focus on individuals or collectives in occupational science?

### **References**

Carandang, K. & Pyatak, E. (2018). Analyzing occupational challenges through the lens of body and biography. *Journal of Occupational Science*. DOI: 10.1080/14427591.2018.1446353 .

Howell, D. & Pierce, D. (2000). Exploring the forgotten restorative dimension of occupation: Quilting and quilt use, *Journal of Occupational Science*, 7:2, 68-72, DOI: 10.1080/14427591.2000.9686467

Lawlor, M.C., & Mattingly, C. (In press). Family perspectives on occupation, health, and disability. In B. Schell, G Gillen & M. Scaffa & (Eds.), *Willard & Spackman's Occupational Therapy* (13th ed.) Philadelphia, PA: Lippincott Williams & Wilkins.

Mattingly, C. (2010). *The paradox of hope: Journeys through a clinical borderland*. Berkeley CA: University of California Press.

Whiteford, G. (2007) Artistry of the Everyday: Connection, Continuity and Context, *Journal of Occupational Science*, 14:2, 77-81, DOI: 10.1080/14427591.2007.968658

## **MEANINGFUL OCCUPATION MEDIATES THE RELATIONSHIP BETWEEN SLEEP DISTURBANCES AND MEANING AND PURPOSE IN LIFE AMONG STUDENT SERVICE MEMBERS AND VETERANS**

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Adam R. Kinney, *Colorado State University*

### **Abstract**

Statement of Purpose: We sought to understand whether the relationship between sleep disturbances and meaning and purpose in life among student service members and Veterans (SSM/V) could be explained by the influence of sleep quality upon meaningful occupation and symptoms of posttraumatic stress disorder (PTSD). Better sleep quality tends to be associated

with a greater sense of meaning and purpose (Turner, Smith, & Ong, 2017), but the mechanisms accounting for this relationship are poorly understood. Sleep disturbances degrade occupational performance, thereby impacting life meaning by limiting the extraction of meaning from daily occupation (Eakman, 2014; Eakman et al., 2017). Further, sleep disturbances exacerbate PTSD symptoms, which are negatively associated with meaning in life among SSM/V (Dutra, Eakman, & Schelly, 2016; Harvey, Jones, & Schmidt, 2003). We investigated whether meaningful occupation and PTSD symptoms mediated the relationship between sleep disturbances and meaning in life. Results may inform efforts which attempt to foster life meaning among SSM/V with sleep disturbances.

**Method:** We employed an explanatory cross-sectional design on a sample of 157 SSM/V. 123 (78.3%) were male, and 125 (79.6%) were Veterans. Online surveys generated responses to indicators reflecting sleep disturbances, meaningful occupation, PTSD, meaning and purpose in life, and demographic characteristics (age, gender, and marital status). We hypothesized that meaningful occupation and PTSD symptoms would mediate the relationship between sleep disturbances and meaning in life. We employed a regression framework to test mediating effects, and included the above demographic characteristics as covariates.

**Results:** The results partially supported our hypotheses. The complete model explained a statistically significant portion of variance in life meaning ( $R^2 = .28$ ,  $F(6,150) = 9.93$ ,  $p < .001$ ). There was a significant total effect of sleep disturbances upon life meaning ( $-.15$ ,  $SE = .05$ ,  $p = .008$ ), as mediated by meaningful occupation and PTSD symptoms. The unique indirect effect of meaningful occupation was significant ( $-.05$ ,  $SE = .02$ , 95% confidence interval [CI] =  $-.10$ ,  $-.01$ ), while the indirect effect of PTSD symptoms was not ( $-.07$ ,  $SE = .04$ , 95% CI =  $-.16$ ,  $.01$ ). 36.91% of the total effect operated indirectly through meaningful occupation, while 45.49% operated indirectly through PTSD symptoms. The unmediated effect of sleep disturbances upon life meaning was not significant.

**Implications for Occupational Science:** Findings suggest that the influence of sleep quality upon engagement in meaningful occupation may help explain the relationship between sleep disturbances and life meaning, and can inform efforts which target this relationship.

**Key words:** Sleep disturbances; meaningful occupation; student service members and Veterans

### **Questions for Discussion**

1. What unique value is afforded by the application of an occupational science-based perspective to efforts which target sleep quality?
2. What are the implications of understanding the role that meaningful occupation plays in the relationship between sleep quality and life meaning for inquiry aligned with occupational science?
3. What are other plausible mechanisms by which sleep disturbances degrade meaning and purpose in life, and how might inquiry aligned with occupational science help uncover these mechanisms?

## References

Dutra, S. T., Eakman, A. M., & Schelly, C. L. (2016). Psychosocial characteristics of student veterans with service-related disabilities: Implications for further research and occupational therapy involvement. *Occupational Therapy in Mental Health, 32*(2), 146-166.

Eakman, A. M. (2014). A prospective longitudinal study testing relationships between meaningful activities, basic psychological needs fulfillment, and meaning in life. *OTJR: Occupation, Participation and Health, 34*(2), 93-105.

Eakman, A. M., Schmid, A. A., Henry, K. L., Rolle, N. R., Schelly, C., Pott, C. E., & Burns, J. E. (2017). Restoring effective sleep tranquility (REST): A feasibility and pilot study. *British Journal of Occupational Therapy, 80*(6), 350-360.

Harvey, A. G., Jones, C., & Schmidt, D. A. (2003). Sleep and posttraumatic stress disorder: A review. *Clinical Psychology Review, 23*, 377-407. doi:10.1016/S0272-7358(03)00032-1

Turner, A. D., Smith, C. E., & Ong, J. C. (2017). Is purpose in life associated with less sleep disturbance in older adults? *Sleep Science and Practice, 1*(1), 1-10.

## PREPARING YOUTH WITH AUTISM SPECTRUM DISORDER TO TRANSITION TO EMPLOYMENT

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Gael I. Orsmond, *Boston University*

Ellen S. Cohn, *Boston University*

### Abstract

**Statement of Purpose:** Employment is an important occupation for transition-age youth; they gain independence and a sense of purpose. The employment outcomes for individuals with autism spectrum disorder (ASD), however, are poor (Shattuck et al., 2012). Most research on employment for this population has focused on personal factors, without considering the interdependence between person and contextual influences. Few studies have investigated how work experiences are shaped by the situations where the occupation occurs. We aimed to understand employment by focusing on how optimal contextual support is provided. We interviewed school personnel to understand their experiences supporting youth with ASD on employment and what factors they considered when identifying work opportunities for these youth.

**Methods:** We conducted semi-structured interviews with 15 school personnel who have supported high school students with ASD on employment preparation. Participants were special education teachers, special education administrators, and related service providers. We conducted thematic analysis of transcribed interviews. We examined the occupation of



employment as influenced by multifaceted transactions among school personnel and youth with ASD in the ecological contexts such as school, family, community and culture (Cutchin, et al 2017).

Results: School personnel expressed the importance of engaging with their local community as an inextricable aspect of successfully maintaining employment for youth with ASD. They focused on environmental factors of the employment setting as well as supporting youth to create a meaningful life in the community. In addition to securing a job, school personnel considered how and where youth would live, navigate within their community, keep safe, maintain recreation and exercise routines, and develop social connections. School personnel described employment as a continuously changing occupation; both entry-level work experiences and career exploration were highly valued activities by school personnel when helping youth develop career goals.

Discussion: This research corresponds to the transactional perspective by identifying the importance of community and social experiences when developing employment as a meaningful occupation. By understanding how school personnel considered gaining employment and being situated in community as ecological wholes, we learned both supporting students in their employment role and creating a meaningful life in community as equally important and indivisible. The research furthers our understanding of employment for youth with ASD by focusing on the reciprocal transactions between individuals with ASD and ever-changing social contexts.

Key words: autism spectrum disorder, transition, employment

### **Questions for Discussion**

1. How does career development as an occupation change between different contexts (e.g. school to community) and time during transition period?
2. How do the broader social contexts, such as cultural norms and societal structure, influence the participation in work occupation for transition-age youth with ASD?
3. How does a transactional perspective contribute to our understanding of the transition to employment for transition-age youth with ASD?
4. By understanding the importance of social contexts when supporting youth with ASD transition to their employment role, what can occupational scientists do for the next step to enhance actions in theory, research, and practice?
5. Given the data described, what additional questions might we ask?
6. Are there any important issue or question to address when analyzing the acquired data?

### **References**

Cutchin, M. P., Dickie, V.A., & Humphry, R. A. (2017). Foregrounding the transactional perspective's community orientation, *Journal of Occupational Science*, 24(4), 434-445. doi: 10.1080/14427591.2017.1365750

Dickie, V., Cutchin, M. P., & Humphry, R. (2006). Occupation as transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 13(1), 83–93. doi:10.1080/14427591.2006.9686573

Hurlbutt, K., & Chalmers, L. (2004). Employment and adults with Asperger syndrome. *Focus on Autism and Other Developmental Disabilities*, 19(4), 215-222.

Kvam, L. & Vik, K. (2015). Discourses of participation in work among men and women in vocational rehabilitation. *Journal of Occupational Science*, (22)3, 345-357. doi: 10.1080/14427591.2014.897204

Shattuck, P. T., Narendorf, S. C., Cooper, B., Sterzing, P. R., Wagner, M., & Taylor, J. L. (2012). Postsecondary education and employment among youth with an autism spectrum disorder. *Pediatrics*, 129(6), 1042-1049. doi: 10.1542/peds.2011-2864

## **OCCUPATIONAL PARTICIPATION AND COMMUNITY INTEGRATION IN POST-SECONDARY STUDENTS WITH CEREBRAL PALSY: CHALLENGING DOMINANT CONCEPTUALIZATIONS**

Amanda Carroll, *University of North Carolina at Chapel Hill*

Nancy Bagatell, *University of North Carolina at Chapel Hill*

### **Abstract**

**Statement of Purpose:** Community integration has been identified as an important concept that can shed light on the inclusion of adults with cerebral palsy (CP) in larger community contexts. Conceptualizations of community integration have included occupational participation as an important component. Students with disabilities face new challenges as they move into new contexts, especially as they move from high school to post-secondary education settings. Relatively little research has focused on the community integration of post-secondary students with CP. The purpose of this study was to explore community integration and occupational participation as experienced by post-secondary students with CP.

**Methods:** This paper draws on data from a larger, ongoing mixed methods study exploring the use of novel approaches to understand community integration in adults with CP. Data from three post-secondary students, ages 19-22, were analyzed. Community integration and occupational participation were assessed through GPS, travel diaries, interviews, surveys, and the Life Interest Values (L!V) Cards. An iterative process of coding and identifying patterns of occupations occurred, leading to the generation of themes within and across participants. These themes were then examined in conjunction with the maps derived from the GPS and survey data. To enhance rigor, both authors participated in the analysis process and data from multiple sources were considered.

**Results:** Findings highlight the transactional nature of community integration for post-secondary students with CP. Central themes included being nested in the campus context, social relationships, adapting to situations, and practicing self-advocacy. Barriers to participation included transportation, fatigue, and stigma. Social relationships, especially relationships with

roommates and community acquaintances such as Uber drivers and grocery store clerks served as facilitators of occupational participation. The campus context as both a support and barrier was noted. While all three participants noted significant barriers to occupational participation, they evaluated their integration in the community positively.

**Implications to Occupational Science:** The importance of relational and contextual elements contributing to community integration were highlighted. While dominant conceptualizations of community integration have focused on frequency and range of occupations, results from this study suggest that the less tangible aspects of community integration such as interconnectedness and belonging may play a large role in individuals' perceptions of integration in the community. Community integration then is not just about doing but doing with others in context. Further research is warranted to explore the transactional nature of community integration and the less tangible aspects of community integration that challenge leading conceptualizations.

**Key words:** Community Integration, Cerebral Palsy, Mixed Methods

### **Questions for Discussion**

1. How can an occupational perspective inform conceptualizations of community integration?
2. How does the use of novel methods in this study inform greater understandings of occupational participation and community integration?
3. How do the experiences of post-secondary students with CP challenge normative assumptions and conceptualizations of community integration in the literature?

### **References**

- Bagatell, N., Chan, D., Rauch, K.K., & Thorpe, D. (2017). "Thrust into adulthood": Transition experiences of young adults with cerebral palsy. *Disability and Health Journal*, 10, 80-86.
- Frish, D., & Msall, M. (2013). Health, functioning, and participation of adolescents and adults with cerebral palsy: A review of outcomes research. *Developmental Disabilities Research Review*, 18(1), 84-94.
- Michelsen, S., Uldall, P., Hansen, T., & Madsen, M. (2006). Social integration of adults with cerebral palsy. *Developmental Medicine and Child Neurology*, 48(8),643-649.
- Wong, Y.I., & Solomon, P.L. (2002). Community integration of persons with psychiatric disabilities in supportive independent housing: A conceptual model and methodological consideration. *Mental Health Services Research*, 4, 13-28.

## **UNDERSTANDING THE OCCUPATIONS OF YOUNG ADULTS WITH AUTISM IN CONTEXT: HOW DOES THE GROUP HOME ENVIRONMENT INFLUENCE SELF-DETERMINATION AND PARTICIPATION?**

Amber M. Angell, *University of Illinois at Chicago*

Theresa Carlson Carroll, *University of Illinois at Chicago*

Lauren Duffy, *University of Illinois at Chicago*

Weronika Zuczek, *University of Illinois at Chicago*

### **Abstract**

**Statement of Purpose:** As youth with autism spectrum disorder (ASD) enter adulthood, many are isolated, with low levels of community participation. Although research has identified the need to promote self-determination (defined as acting as the causal agent in one's life) in young adults with ASD, they face a number of participation challenges, including difficulty identifying their occupational interests. Self-determination literature suggests this is due in part to a lack of environmental opportunities for young adults with ASD to explore/pursue their interests. This paper presents findings from Phase 1 of a mixed-methods study that uses an interest-based approach to explore participation and self-determination in young adults with ASD in urban group homes. The aim of Phase 1 was: To understand how the environment supports/constrains residents' self-determination and participation in a range of occupations.

**Description of Methods:** For Phase 1, we recruited three residents and five staff members. Phase 1 consisted of qualitative participant observations of structured and unstructured group home activities (e.g., mealtimes, house meetings, social activities). We conducted seven observation sessions (13 hours) between January and April 2018 using a structured observation guide. Three authors coded the data using theoretical and essentialist thematic analysis at the latent level (Braun & Clarke, 2006), then compared and resolved differences.

**Results:** We identified six themes: Self-determination barriers; Participation barriers; Self-determination facilitators; Participation facilitators; Dilemmas; and Missed opportunities. Key barriers were staff using directive approaches, and residents' low self-concept, e.g. internalized negative messages about their ASD-related challenges. Facilitators included amiable staff/resident interactions. Dilemmas were situations where it was unclear the extent to which staff were providing residents with necessary help, versus failing to allow residents choice and control. We identified missed opportunities where slight changes in staff's approach or group home policy might better support residents' participation, e.g. giving residents greater control over and responsibility for their schedules.

**Implications for Occupational Science:** An occupational justice lens on the group home environment with young adults with ASD reveals a tension between residents' need for support and right to the 'dignity of risk,' i.e. opportunity to make mistakes. There is a dearth of autism research examining the complex relationship between young adults with ASD and the

staff/caregivers who support them, including ways in which staff/caregiver actions can unintentionally limit the young adults' occupational opportunities. Longitudinal research is needed to understand how opportunities to practice self-determination at a young age impact occupational engagement and participation into adulthood.

### **Questions for Discussion**

1. How does the concept of self-determination, most often discussed in the education literature, relate to an occupational science perspective; and what does an occupational science lens contribute to the existing construct?
2. Discuss intersections of occupational science and emerging research on autistic self-identity as related to the findings of this study.
3. How might occupational science research further investigate the types of dilemmas and tensions raised during this presentation?

### **References**

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Durocher, E., Gibson, B. E., & Rappolt, S. (2013). Occupational justice: A conceptual review. *Journal of Occupational Science*, 21(4), 418–430. <https://doi.org/10.1080/14427591.2013.775692>

Koenig, K. P., & Williams, L. H. (2017). Characterization and utilization of preferred interests: A survey of adults on the autism spectrum. *Occupational Therapy in Mental Health*, 15(3), 295–305. <https://doi.org/10.1080/0164212X.2016.1248877>

McDonald, T. A. M. (2016). Identity as a mediator between stigma and stereotype threat on postsecondary outcomes for adults on the autism spectrum (PhD dissertation). University of Wisconsin - Madison. Retrieved from <https://search.proquest.com/openview/234bc934af102cebe5361cdc1ef0a646/1?pq-origsite=gscholar&cbl=18750&diss=y>

Wehmeyer, M. L., Shogren, K. A., Little, T. D., & Lopez, S. J. (Eds.). (2017). *Development of Self-Determination Throughout the Life-Course*. Dordrecht, The Netherlands: Springer Science+Business Media.

## AFTERNOON SESSION 2

### FORUM:

#### **PROBLEM-BASED LEARNING AS A PEDAGOGICAL TOOL TO FACILITATE THEORY ENGAGEMENT ASSOCIATED WITH OCCUPATIONAL SCIENCE**

Adam DePrimo, *University of North Carolina at Chapel Hill*

Susan Coppola, *University of North Carolina at Chapel Hill*

Jenny Womack, *University of North Carolina at Chapel Hill*

#### **Abstract**

**Aims:** This forum session will share and explore how carefully designed Problem-Based Learning (PBL) experiences in an occupational therapy curriculum can be used to convey important occupational science theory to inform practice with older adults. Participants will identify how complex, case-based methods call upon and advance students' understandings about transaction, critical theory, and Life Course Theory.

**Rationale:** PBL as a pedagogical approach is neither novel to occupational therapy educators nor an exclusive approach. PBL aligns with a Deweyan pedagogy that allows students to actively engage and coordinate theory with practice (Coppola, 2013; Yew & Goh, 2016). In keeping with our curriculum philosophy, we offered a specific take on PBL that required students to engage with key theories associated within occupational science. Those theories are the transactional perspective (Cutchin & Dickie, 2013), critical theory (Rudman, 2013), and Life Course Theory (Elder, 1994). This PBL process occurred in the final semester of an entry-level OT program for students who had successfully completed a Fieldwork II experience. Our intention with these advanced learners was to challenge their investigative, reasoning, and collaborative skills to address complex and evolving challenges faced by a family at various phases of life and ability. This Cuban-American family, situated in North Carolina, navigated myriad medical, economic, and societal transitions related to aging and end-of-life. Each week, students were presented with new levels of complexity and evolving life events for this family. Students were then able to explore a broader, deeper understanding of the family through the processes of: investigating the transactional relationships of social and contextual situations, critically reflecting on societal norms related to aging and health, and situating the characters within their generational cohort to understand potential life history and trajectories.

**Outcomes for Participants:** For this forum session we are proposing three objectives: Participants will identify the process and intention of a tailored Problem-Based Learning approach; Participants will grapple with the challenges and opportunities for PBL experiences to deepen understanding of occupational science perspectives in an occupational therapy curriculum; and, Participants will discover how to create and manage a case-based, group PBL experience to teach a transactional perspective, critical theory, and Life Course Theory.

Key words: PBL, Pedagogy, Teaching Perspectives of Occupation

### Questions for Discussion

1. What curriculum philosophies or overarching theoretical frameworks are important in your context, and how might you use the described PBL process to address them?
2. How does this example of a continuing family narrative complement or contrast with other approaches to PBL with which you might be familiar?
3. In what ways do you envision moving students from implicit understandings of core curriculum philosophies to explicit articulation of them through a process like this tailored PBL approach?
4. What challenges and opportunities do you see for using a similar approach in your own pedagogy?
5. How can the PBL process described also be used to highlight peripheral processes such as teamwork, research skills, and group dynamics?

### References

- Coppola, S. (2013). Deweyan educational philosophy in occupation-centered curricula. In M. Cutchin & V. Dickie (Eds.), *Transactional Perspectives on Occupation* (pp. 199-213). New York: Springer.
- Cutchin, M. & Dickie, V. (2013). Transactional perspectives on occupation: An introduction and rationale. In M. Cutchin & V. Dickie (Eds.), *Transactional Perspectives on Occupation* (pp. 1-10). New York: Springer.
- Elder, G. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly*, 57(1), 4-15.
- Rudman, D.L. (2013). Enacting the critical potential of occupational science: problematizing the 'individualizing of occupation'. *Journal of Occupational Science*, 20(4), 298-313.
- Yew, E. & Goh, K. (2016). Problem-based learning: An overview of its process and impact on learning. *Health Professions Education* 2(2), 75-79.

## **OCCUPATIONAL THERAPY SLEEP CONSIDERATIONS OF OLDER ADULT'S HEALTH OUTCOMES POST-HOSPITALISATION**

Aislinn F Lalor, *Monash University, Australia*

Ted Brown, *Monash University, Australia*

Terry Haines, *Monash University, Australia*

## **Abstract**

**Introduction:** Sleep is imperative for optimal engagement and occupational performance in everyday occupations. Impaired sleep quality can have negative impacts on health, well-being and functioning however there is limited evidence regarding the recovery and re-engagement in everyday occupations for older clients following hospitalisation.

**Objectives:** To determine the potential impacts of impaired sleep quality on the health outcomes of older adults following hospitalisation.

**Methods:** 311 hospitalised older Australian adults completed a structured questionnaire that gathered data about the health outcomes of anxiety/depression symptoms, falls, activity participation, social isolation, and quality of life for older adults sleep quality post hospitalisation. Regression analyses were undertaken to determine health outcomes associated with impaired sleep quality during hospitalisation.

**Results:** Poor sleep quality during hospital for older adults was not a predictor of poorer health outcomes related to quality of life, symptoms of depression and/or anxiety, social isolation, household or recreational activity participation, hospital readmissions or falls at three- and six-months post-discharge.

**Conclusions:** Poor sleep quality was not a predictor of poorer health outcomes post-hospitalisation in this study however poor sleep quality in and of itself is distressing. Occupational therapy has an essential role to address this distress in order to evidence client-centred practice. Further consideration of the scope for embedding occupational science concepts regarding sleep of older adults within occupational therapy education to enhance development of theoretical knowledge and reasoning skills will also be discussed.

## **Questions for Discussion**

1. How can occupational therapists and educators enhance the scope of occupational science concepts regarding sleep in clinical practice and occupational therapy curriculum?
2. How can occupational therapists provide targeted and comprehensive intervention to sleep quality for older adults during and following hospitalisation?
3. What can occupational therapists do to be better recognised for their involvement within the field of sleep?

## **References**

American Occupational Therapy Association (2014). Occupational therapy practice framework: Domain & process, 3rd edition. *American Journal of Occupational Therapy*, 68(S1), S1–S48. doi:10.5014/ajot.2014.682006

Boswell, J., Thai, J., & Brown, C. (2015). Older adults' sleep. In A. Green & C. Brown (Eds.), *An Occupational Therapist's Guide to Sleep and Sleep Problems* (pp. 185–206). London, UK: Jessica Kingsley Publishers.

Buysse, D. J. (2014). Sleep health: Can we define it? Does it matter? *Sleep*, 37(1), 9–17. doi:10.5665/sleep.3298



Kucharczyk, E. R., Morgan, K., & Hall, A. P. (2012). The occupational impact of sleep quality and insomnia symptoms. *Sleep Medicine Reviews*, 16(6), 547–559.  
doi:10.1016/j.smrv.2012.01.005

## **THE QUANDARY OF SLEEP: HOW SLEEP IS REPRESENTED (OR NOT) IN RESEARCH ON LONG-TERM UNEMPLOYMENT**

Rebecca M Aldrich, *University of Southern California*

Debbie Laliberte Rudman, *Western University*

Alyssa Weber, *Saint Louis University*

### **Abstract**

**Statement of Purpose:** This presentation will discuss one set of findings from a two-sited, four-year study of long-term unemployment. The study utilized governmentality theory and a critical occupational perspective to understand possibilities and boundaries for occupation during long-term unemployment. The third phase of our study generated data in the United States (USA) and Canada through interviews, observations, time diaries, and/or occupational maps with 23 people who self-identified as being long-term unemployed. This paper presents time diary findings related to sleep for 18 participants (7 men, 11 women). In addition to comparing duration of sleep against national data for both contexts, this presentation aims to address how understandings of and values attached to sleep are situated within broader discourses.

**Methods:** We asked participants to independently complete Scanlan and Bundy's (2011) Modified Occupational Questionnaire (MOQ) on a weekday and weekend day of their choosing. The MOQ covers a 24-hour period and is divided into 1-hour increments. For each increment, respondents indicated what occupation they were engaging in; who they were doing the occupation with; where the occupation was taking place; how they categorized the occupation; why they were doing the occupation; how much they valued the occupation; and how much they believed society valued the occupation. Following the completion of the two MOQ forms, participants discussed their responses with researchers in an open-ended interview that explored how long-term unemployment affected occupational engagement.

**Results:** Although all respondents from the USA listed sleep on their MOQ forms, nearly half of the Canadian participants did not document their sleep. Our analysis will compare participants' reported duration of sleep against national data for both contexts. In addition, we will explore the diverse ratings and comments participants expressed relative to why they slept, how much they valued sleeping, and how much they thought society valued their sleep. Our analysis will couch the results within social discourses regarding unemployment, making suggestions for how such discourses shaped participants' thinking about sleep as well as their decision to represent sleep in particular ways during data generation.

Implications: Methodologically, our study revealed the complexity of generating data about sleep given its taken-for-granted nature. Our findings also illuminated that sleep seemed, to some, at odds with ideal subjectivities for unemployed people and, to others, an absolute necessity for people's abilities to inhabit ideal subjectivities. We will discuss the benefits of an occupational perspective for studying sleep and unemployment.

Key words: Sleep, long-term unemployment, critical qualitative research

### **Questions for Discussion**

1. In what ways do these findings challenge discursive constructions of unemployed people?
2. In what ways do these findings align or contrast with existing findings from national time use data sets?
3. What does an occupational perspective add to existing research on sleep during unemployment?

### **References**

Bureau of Labor Statistics. (2016). Labor force statistics from the Current Population Survey: Number unemployed for 27 weeks or over. Retrieved from <https://data.bls.gov/cgi-bin/surveymost>

Casselmann, B. (2014, June 19). It's hard to get off the couch when you're unemployed. Retrieved from <https://fivethirtyeight.com/features/its-hard-to-get-off-the-couch-when-youre-unemployed/>

Laliberte Rudman, D. & Aldrich, R. M. (2016). 'Activated, but stuck': Applying a critical occupational lens to examine the negotiation of long-term unemployment in contemporary socio-political contexts. *Societies*, 6(28), 1-17. doi: 10.3390/soc6030028

Scanlan, J. N. & Bundy, A. C. (2011). Development and validation of the Modified Occupational Questionnaire. *American Journal of Occupational Therapy*, 65, e11-e19. doi: 10.5014/ajot.2011.09042

Statistics Canada. (2016). Table282-0048. Labour Force Survey estimates (LFS), duration of unemployment by sex and age group, annual (persons unless otherwise noted). CANSIM (database). Retrieved from <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2820048>

# SYSTEMATIC LITERATURE REVIEW OF INSUFFICIENT SLEEP AND SHIFT WORKER FITNESS TO DRIVE: PRELIMINARY FINDINGS

Melissa Knott, *Western University*

Sherrilene Classen, *University of Florida*

Sarah Krasniuk, *Western University*

Marisa Tippett, *Western University*

Liliana Alvarez, *Western University*

## Abstract

**Statement of Purpose:** Seventy-five percent of shift workers report chronic insufficient sleep as a primary health complaint (Akerstedt & Wright, 2009). Insufficient sleep is a form of occupational deprivation resulting from external restrictions (Whiteford, 2000) of employment demands, preventing workers from obtaining adequate sleep. Insufficient sleep is linked to impaired physical and cognitive abilities, such as slowed reaction time, and impaired memory, attention, and alertness (Banks & Dinges, 2011). As a result, those driving with insufficient sleep (i.e., shift workers), carry a disproportionate burden of road traffic injuries and fatalities (Stutts et al., 2003). The objectives of this systematic literature review (SLR) are to identify: 1) The level of evidence in the risk and protective factors underlying a) fitness to drive (FTD) and b) driving performance (DP) in shift workers with insufficient sleep. 2) The level of confidence in the literature. And, 3) Consider recommendations for clinical practice, research, and policy.

**Methods:** This study follows the seven steps of an SLR: 1) formulate the problem, 2) locate and select studies, 3) collect data, 4) appraise critically, 5) analyze and present data, 6) interpret results, and 7) disseminate information (Cooper & Hedges, 2009). Authors used a focused keyword search targeting insufficient sleep, shift work, and driving in six content-specific databases (CINAHL, PubMed, Scopus, PsycINFO, EMBASE, and ProQuest Nursing and Allied Health). Searches and footnote chasing returned 1226 unique articles. In pairs, reviewers independently conducted title and abstract screening with inclusion criteria for full review: primary studies published in the English language, driving simulator or on-road assessment outcomes with shift workers, aged 16-65. Next, reviewers systematically critically appraise the risk of bias to determine the level of evidence and analyze the level of confidence. Finally, authors consider recommendations regarding the determinants underlying FTD and DP for clinical practice, research, and policy.

**Results:** Twenty-one articles met inclusion criteria for full-text review (96-98 percent agreement). Eleven studies (two on-road and nine simulator) remain for ongoing data extraction and analysis. Participants (N=285) were minority female (N=37), and included: police officers (N=107), physicians (N=106), and mixed groups (i.e., plant, newspaper employees) (N=62).

Implications Related to Occupational Science: This SLR synthesizes and appraises existing evidence to identify the determinants of FTD and DP for shift workers with insufficient sleep. This work demonstrates how shift work, via occupational deprivation of sleep, results in insufficient sleep impacting the subsequent risk of road traffic injuries and fatalities in shift workers.

Key words: Systematic Literature Review, Insufficient sleep and occupational deprivation, Social determinants of Fitness to drive

### **Questions for Discussion**

1. If insufficient sleep is a primary health complaint of 75% of shift workers, why is it that certain groups (e.g., police, physicians) make up the majority of participants studied, while other groups (e.g., those working in factories, emergency response, hospitality, or the taxi industry) are not included?
2. In future, how might researchers engage these groups of underrepresented shift workers to promote better representation of employees engaged in shift work occupations?
3. How might the social determinants of health in these studies (e.g., age, gender, employment sector, health status) aid us in understanding the context and generalizability of these findings?

### **References**

Akerstedt, T., & Wright, K. P. (2009). Sleep Loss and Fatigue in Shift Work and Shift Work Disorder. *Sleep Medicine Clinics*, 4(2), 257-271.

Banks, S., & Dinges, D. F. (2011). Chronic Sleep Deprivation. In M. H. Kryger, T. Roth & W. C. Dement (Eds.), *Principles and Practice of Sleep Medicine* (5th Ed). St. Louis, MI: Elsevier Saunders.

Cooper, H. & Hedges, L.V. (2009). Research synthesis as a scientific process. In H. Cooper, L. V. Hedges & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (Second Ed.). New York, NY: Russel Sage Foundation.

Stutts, J. C., Wilkins, J. W., Osberg, J. S., & Vaughn, B. V. (2003). Driver risk factors for sleep-related crashes. *Accident Analysis and Prevention*, 35, 321-331.

Whiteford, G. (2000). Occupational deprivation: Global challenge in the new millennium. *British Journal of Occupational Therapy*. 63(5),200-204.

## **CAUSES OF OCCUPATIONAL INJUSTICE: SOCIAL AND STRUCTURAL DETERMINANTS OF HEALTH**

Abby L. Draper, *Rush University Medical Center*

Christopher Nolan, *Rush University Medical Center*

Charlotte Royeen, *Rush University Medical Center*

### **Abstract**

**Intent:** The purpose of this paper is to integrate the theories of occupational justice and health equity, highlighting the importance of combining forces to improve health.

**Argument:** On a scorching hot Chicago night in 1995, suffocating weather conditions kept countless people from sleeping. Many suffered alone, and over 700 people died. (Klinenberg, 2015). The catastrophic heat wave illuminated social and occupational influences on wellness; death tolls disproportionately affected people with inadequate social support or from low socioeconomic backgrounds (Klinenberg, 2015). Effects of illness and disaster are exacerbated in the lives of society's most vulnerable; a heat wave causing disparate death rates is one example of how barriers to occupation cause disparate health outcomes for vulnerable populations.

The occupational justice framework emphasizes that social, structural, and other contextual barriers prevent full health and wellness (Townsend & Wilcock, 2004). For example, a neighborhood's low walkability score may prevent a woman from walking to buy groceries or keep her awake at night worrying about her child's safety. Community mobility and sleep are important occupations that contribute to wellness, and a person living in an unsafe neighborhood may participate less in these occupations, leading to poorer health.

The field of health equity highlights the way social determinants, such as physical environment, health care, social context, education, and economic stability, affect a person's wellbeing (Office of Disease Prevention and Health Promotion, 2010). Health and wellbeing are inherently unequal opportunities when society overlooks social and occupational determinants and subscribes to a primarily medical model of illness (Wilcock & Hocking, 2015). An occupational justice approach adds the purpose of participation and fulfillment to health equity work addressing these determinants. Many people argue that occupational therapists in the United States have not effectively applied ideas of justice in everyday practice (Aldrich, Boston, & Daaleman, 2017). The field of health equity offers clearly defined and accepted language to aid in discussing social determinants with an occupational lens. Additionally, while research about social determinants of health and occupational barriers to health exists, little theory has emphasized the interplay between the two fields of health equity and occupational justice. Connecting the two would improve and promote health.

**Importance to occupational science:** Occupational justice and health equity efforts emphasize a holistic, broad view of health. We fail to achieve this view of health when various disciplines are

fragmented and do not communicate with one another (Wilcock & Hocking, 2015). In working to change society's view of health and promote justice, interdisciplinary collaboration will be required to understand how to apply these ideas to practice. Occupational science lends itself to such interdisciplinary collaboration.

Conclusion: Health inequities and occupational injustices cause negative effects on health; the fusion of ideologies from health equity and occupational therapy will enhance approaches to address determinants of health and promote wellness in all people.

Key words: occupational justice, health equity, inter-field theory

### **Questions for Discussion**

1. What are some examples of social and occupational determinants of health?
2. Why is a holistic view of health important?
3. Why should these two fields work together to improve health?

### **References**

Aldrich, R. M., Boston, T. L., & Daaleman, C. E. (2017). Centennial Topics—Justice and U.S. occupational therapy practice: A relationship 100 years in the making. *American Journal of Occupational Therapy*, 71, 7101100040. <https://doi.org/10.5014/ajot.2017.023085>

Klinenberg, E. (2015). *Heat Wave: A Social Autopsy of Disaster in Chicago*. Chicago, IL: The University of Chicago Press.

Townsend, E., & A. Wilcock, A. (2004). Occupational justice and client-centered practice: A dialogue in progress. *Canadian journal of occupational therapy*, 71(2), 75-87.

Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion (2010). *Healthy People 2020*. Retrieved from: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

Wilcock, A. A, Hocking, C. (2015). *An occupational perspective of health*. Thorofare, NJ: Slack Incorporated.

## **PRE-SLEEP ROUTINES IN ADULT NORMAL SLEEPERS**

Jean S. Koketsu, *Eastern Kentucky University*

### **Abstract**

Statement of Purpose: The goal of the project was to describe the pre-sleep routines in adult normal sleepers. The aim of this study was to add to the body of knowledge in occupational science and therapy regarding pre-sleep routines.

Description of Methods: *Participants* The participants in this study were 16 adults, between the ages of 23 and 60-years-old who were considered “good sleepers,” based on scores from the

Pittsburgh Sleep Quality Index (PSQI) (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). The adults were not responsible for caring for children in the home and were healthy. *Data collection* A convenience sample of adults who met criteria drew pictures of their pre-sleep routines. Then, interviews to clarify the drawings and routines were conducted and later transcribed. *Analysis* A grounded theory approach was used. Analysis of the data started from the beginning until theoretical saturation. Drawn activities were categorized and compared with interview data. Analysis shifted from initial coding to explanations that supported theories. A journal and summaries were used throughout with logistics, methods, and hypotheses described. Reflexivity, peer examination, coding and re-coding of the data occurred throughout while using a clear audit trail.

**Results:** The adult normal sleepers performed an average of eight activities in three to four places, using an average of five objects, mainly in solitude, during the pre-sleep routine period. The pre-sleep routines had a clear beginning and end, included a broad range of activities, and contained some activities that were obligatory as well as optional. People seemed to do activities before bedtime to ensure that sleep is not disturbed and to prepare for the next day. Drawings were a useful method to collect data on routines.

**Implications:** Since the profession often utilizes the construct of routines, it is important to study it (Clark, 2000; Ludwig, 1998; Royeen, 2010). This project will help to describe pre-sleep routines, which occur prior to sleep, the most important restorative occupation in which humans engage (Pierce, 2014). This research can inform occupational therapists who help adults with and without sleep issues to understand the usual patterns and dynamics of pre-sleep routines.

**Key words:** Pre-sleep routine, Sleep Routine, Bedtime Routine

### **Questions for Discussion**

1. Discuss implications of pre-sleep routines considered as occupations.
2. How can having descriptions of pre-sleep routines help occupational therapists help people with sleep issues?

### **References**

- Buysse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index (PSQI): A new instrument for psychiatric research and practice. *Psychiatry Research*, 28(2), 193-213.
- Clark, F. A. (2000). The concepts of habit and routine: A preliminary theoretical synthesis. *The Occupational Therapy Journal of Research*, 20(Suppl), 123S-137S.
- Ludwig, F. M. (1998). The unpacking of routine in older women. *American Journal of Occupational Therapy*, 52(3), 168-175. doi:10.5014/ajot.52.3.168
- Pierce, D. (Ed.). (2014). *Occupational science for occupational therapy*. Thorofare, NJ: SLACK.

Royeen, C. B. (2010). Towards an emerging understanding of morning routine: A preliminary study using developing methods in art-based inquiry. *Irish Journal of Occupational Therapy*, 38(1), 30-42.

## **FORUM:**

### **TRANSACTIONS BETWEEN SLEEP AND OCCUPATIONAL ENGAGEMENT: LOOKING AT HABITS IN CONTEXT**

Tracy Jalaba, *University of Southern California*

Samantha Valasek, *University of Southern California*

#### **Abstract**

**Aims/intent:** To elucidate the dynamic and transactional relationships between sleep and occupational engagement. To explore the powerful influence of sleep on occupational engagement as well as that of occupational engagement on sleep. To understand sleep's role as a modifiable risk factor impacting health and holistic well-being. To discuss key habits and routines that influence these relationships via description of applications to case studies across a range of populations (e.g. adults with Autism, individuals who are overweight, college students).

**Rationale:** Adequate sleep of sufficient duration is foundational to occupational engagement. The ability to engage in sleep and rest can have dramatic impacts on physical and cognitive function. However, according to the CDC, 28.5-44.1% of Americans do not get the recommended amount of sleep.

Taking a transactional perspective on sleep helps to highlight the complex transactions that take place between habits and contexts throughout one's day that impact the ability to achieve functional coordination for adequate sleep (Aldrich, 2008; Evans & Rodger, 2008).

Correspondingly, one's quality of sleep participation alters the context in which one approaches daily occupations by way of the aforementioned factors and, thus, can either enhance or diminish one's ability to achieve a desired end-in-view (Aldrich, 2008). In fact, utilizing this particular lens allows for an appreciation of the unity between waking and non-waking life. Occupational science literature on lifestyle balance provides a model for the meaningful inclusion of sleep in discussions regarding well-being (Wagman, Håkansson & Björklund, 2012).

Occupational science supports the role of habits in the establishment and maintenance of health-promoting behaviors tantamount to quality sleep (Fritz & Cutchin, 2017). Accordingly, these specific habits should be studied from the occupational science perspective to enhance the field's understanding of their importance and impact. As the benefits of adequate sleep are both physiological and functional (benefits such as increased energy, motivation, memory, productivity, and physiological function as well as decreased stress, inflammation, and blood pressure), a better understanding of how sleep habits are formed and reformed could provide more evidence for supporting the engagement of a variety of at-risk populations, such as adults with autism, individuals who are overweight, and college students (Gutman et.al., 2017).



Potential outcomes for participants: Improved understanding of the role of sleep in occupational engagement. Appreciation for the complexity of these relationships and the many daily transactions that influence them. Identification of common sleep-promoting and sleep-detering factors. Exploration of the meaning of sleep as an occupational. Examination of the sleep as a factor in lifestyle balance.

Key words: Transactionalism, Sleep, Habit

### **Questions for Discussion**

1. People spend approximately 1/3 of their lives sleeping. Do you consider sleep an occupation? Why or why not?
2. What is the role of sleep in relation to occupational engagement? What transactions are occurring?
3. What clinical research methods may be appropriate for studying interactions between sleep habits and routines, sleep ability, and occupational engagement? What would be appropriate means of collaboration between clinicians and researchers in this area?
4. Considering the case studies shared, how have societal and technological changes contributed to the inadequate sleep epidemic? Which factors would be of interest for study in occupational science?

### **References**

- Aldrich, R. M. (2008). From complexity theory to transactionalism: Moving occupational science forward in theorizing the complexities of behavior. *Journal of Occupational Science*, 15(3), 147-156.
- Evans, J. & Rodger, S. (2008). Mealtimes and bedtimes: Windows to family routines and rituals, *Journal of Occupational Science*, 15(2), 98-104.
- Fritz, H. and Cutchin, M. (2017). The transactional perspective on occupation: A way to transcend the individual in health promotion interventions and research. *Journal of Occupational Science*, 24(4), 446-457.
- Gutman, S. A., Gregory, K. A., Sadlier-Brown, M. M., Schlissel, M. A., Schubert, A. M., Westover, L. A., & Miller, R. C. (2017). Comparative effectiveness of three occupational therapy sleep interventions: A randomized controlled study. *OTJR: occupation, participation and health*, 37(1), 5-13.
- Wagman, P., Håkansson, C. & Björklund, A. (2012). Occupational balance as used in occupational therapy: A concept analysis. *Scandinavian Journal of Occupational Therapy*, 19(4), 322-327.

## **THE PHILOSOPHY AND SCIENCE OF THE RESTORATIVE POWERS OF OUTDOOR RECREATION**

Don Gordon, *University of Southern California*

## **Abstract**

**Intent:** This paper will examine outdoor recreation as a fundamentally restorative occupation, with an emphasis on contemplative recreation as a means to restore mind, body, and spirit. Contributions of both philosophy and science will be considered.

**Argument:** An appreciation of the restorative aspect of spending time outdoors resonates with thinking from both the past and the present. John Muir, one of the most important voices in the history of social movements with the intention of preserving natural places wrote “Come to the woods, for here is rest. There is no repose like that of the green deep woods. Of all the upness accessible to mortals, there is no upness comparable to the mountains.” (Teale, 1954). Science now continues to investigate the health benefits of the outdoors with one of the most interesting elements of this research is how it immediately includes anthropological and emotional elements in an effort to understand the therapeutic effect that comes from being outdoors (Godbey, 2009). Natural landscapes allow for relaxation that can alleviate social stressors that can lead to aggression and violence producing “social illness” (Godbey, 2009). There is also a very relevant social justice aspect to this occupation as open spaces can be difficult to access in some urban environments. Given these facts it would seem that a further understanding of the occupational aspects of outdoor activity could provide important insights for occupational science.

**Importance to occupational science:** This topic represents a fundamental component of the human restorative system, and understanding the biological, psychological, and social aspects of the human response to outdoor engagement will improve this foundational occupation.

**Conclusion:** Outdoor recreation has been a part of the human experience since the dawn of humankind, understanding the occupational aspects of the primordial occupation is relevant to occupational science.

**Key words:** restoration, stress, well-being

## **Questions for Discussion**

1. How does the appreciation of nature and taking time for contemplation fit within our current society?
2. What can we do to facilitate this appreciation?

## **References**

Godbey, G. (2009). Outdoor Recreation, Health, and Wellness: Understanding and Enhancing the Relationship RFF Discussion Paper No. 09-21. Available at SSRN: <https://ssrn.com/abstract=1408694> or <http://dx.doi.org/10.2139/ssrn.1408694>

Teale, E.W. (1954). The wilderness world of John Muir. Boston: Houghton Mifflin Company.

# **RESTORATIVE OUTDOOR URBAN CONTEXTS: EXPLORING SOCIAL INTEGRATION IN PARKS AND PLAYGROUNDS**

Helen Lynch, *University College Cork*

## **Abstract**

Contact with nature helps people recover from stress (Wells & Evans, 2003) and is self-restorative for children (Korpela, Ylen, Tyrvaainen, & Silvennoinen, 2008). Community green spaces such as parks and playgrounds, provide restorative opportunities in urban settings and should be places of inclusive play opportunities for all children. However, research has shown that families of children with disabilities are often excluded from outdoor play in community settings due to factors such as physical inaccessibility, and attitudinal barriers (Anaby, et al., 2013; Moore & Lynch, 2015). The purpose of this study was to explore local park-playground provision in one urban community in Ireland. The aim was: to conduct research with ten child-adult units of diverse abilities to gain insights into facilitators, and barriers in their use of public parks and playgrounds; to conduct research with local council providers to garner insights into their provision of restorative opportunities in five local park-playground units; Ethical approval was granted from the Social Research Ethics Committee of University College Cork, September 2017. This was a nationally funded study, conducted from October 2017 to May 2018.

**Methodology:** The study involved three phases 1) A desk-based review of evidence and guidelines for inclusive parks and playgrounds. 2) An audit of five urban public park-playgrounds for play-value, accessibility, and usability. 3) Interviews with participants: four local council providers and ten child-adult units, who used these park-playgrounds.

**Data analysis:** Interview data were analysed using thematic analysis to determine significant themes and subthemes. Observational data were used to analyse the play value and universal design characteristics of the local park-playground units guided by national standards for universal design.

**Findings:** The importance of having nearby green spaces in this community was identified and included participation in intergenerational opportunities for social integration. Participants engaged in restorative activities in parks-playgrounds, valuing the opportunity to rest, socialise, and experience nature. However, the park-playgrounds were designed with little play value for older children or for children with diverse abilities including visual or motor impairments. Providers identified lack of knowledge in designing for inclusive play.

A model of park-playground provision emerged, that consists of three inter-related areas: principles of good practice, design considerations and playability. Findings illuminate the centrality of play value as a fundamental concern in providing successful intergenerational park-playground spaces.

The results of this study inform the development of national guidelines for inclusive park-playground design.

## Questions for Discussion

1. How can knowledge of occupation and place inform designing for social inclusion?

## References

Anaby, D., Hand, C., Bradley, L., Direzze, B., Forhan, M., Digiacomio, A., & Law, M. (2013). The effect of the environment on participation of children and youth with disabilities: a scoping review. *Disability and Rehabilitation*, 35(19), 1589-1598.

Korpela, K., Ylen, M., Tyrvaainen, L. & Silvennoinen, H. (2008). Determinants of restorative experiences in everyday favourite places. *Health & Place*, 14, 636-652.

Moore, A., & Lynch, H. (2015). Accessibility and usability of playground environments for children under 12: A Scoping Review. *Scandinavian Journal of Occupational Therapy*, 22(5), 331-344

Wells, N. M. & Evans, G. W. (2003). Nearby nature: A buffer of life stress among rural children. *Environment and Behavior*, 35, 311-330

## CHOOSING RESTFUL AND RELAXING OCCUPATIONS

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### Abstract

Statement of Purpose: Occupations are chosen for many reasons. Each occupational choice has unique juxtapositions of personal characteristics, including sensory processing characteristics. The purpose of this study was to understand the connections between the experiential characteristics of occupations identified as restorative and sensory processing characteristics.

Methods: This study is a secondary analysis of data collected using two pre-existing tools, the Daily Occupational Experience Survey (revised) (DOESr) and the Adult Sensory Processing Scale (ASPS). Respondents were asked to choose a preferred/pleasurable occupation and complete the two questionnaires. Previous analysis of the DOESr, a 31-item assessment that focuses on the experiential characteristics of preferred occupations, yielded five factors: Restoration, Mastery, Ludos/Adventure, Heighten Awareness, and Creativity. Restoration was linked to the experiences of relaxing, pleasurable, engaged for the self and providing freedom. Analysis of the ASPS, a self-reported assessment tool targeting sensory processing and arousal, resulted in 11 factors associated to over-and under-responsiveness to specific sensory experiences. In order to understand the links between occupational choices and sensory processing, in this study we used cluster analysis on data collected from 451 adults who completed both the DOESr and the ASPS.

Results: The results from cluster analysis revealed six clusters, similar to the five factors previously identified in DOESr, three of these clusters will be discussed as they relate to the topic of this conference. Participants clustered into the restorative cluster presented increased sensitivity to tactile sensations and high anxiety/arousal levels. While participants who sought intense and challenging occupations, they showed proprioceptive seeking characteristics. And a third group of people who preferred creative occupations, did not show distinct sensory processing characteristics.

Implications to Occupational Science: This study establishes links between experiential characteristics of chosen occupations and personal characteristics including sensory processing. Understanding the motivations leading to occupational choices (choice of restorative and other occupations) is a central theme in OS.

Discussion: Although the link between choice of occupation and sensory processing has been theorized, this is the first study that used statistical analysis with a large number of participants to establish associations between occupational choices and sensory processing preferences. Future studies could further explore how people value restorative activity and its experimental characteristics related to sensory processing by personal characteristics such as gender, culture, and personality, etc.

### **Questions for Discussion**

1. What is the link between a person's assigned meaning to an occupation and its experiential characteristics?
2. What personality characteristics influence choice of preferred occupations such as restorative occupations?

### **References**

- Blanche, E. I., Parham, L. D. & Chang, M. (2015). Preferred Activities and Well Being. Presentation at the Fourteenth Annual Research Meeting of the Society for the Study of Occupation. Fort Lauderdale, Fl. October 2015.
- Chang, M., Belousove, T., Guerrero, L., Hiatt, K., Hutter, L., & Lucey, E. (2017). Impact of sensory processing patterns on quality of sleep. Poster presentation at the Annual Meeting of the American Occupational Therapy Association, Philadelphia, PA.
- Kinnealy, M., Koenig, K.P., and Smith, S. (2011). Relationships between sensory modulation and social supports and health-related quality of life. *American Journal of Occupational Therapy*, 65(3), 320-327. doi: 10.5014/ajot.2011.001370
- Vallerand, R. J., Salvy, S. J., Mageau, G. A., Elliot, A. J., Denis, P. L., Grouzet, F. M., & Blanchard, C. (2007). On the role of passion in performance. *Journal of personality*, 75(3), 505-534.

## STUDENT POSTER SESSION

### **A TANGLED WEB: STUDYING OCCUPATIONAL BALANCE IN DUAL-EARNER FAMILIES WITH SCHOOL-AGED CHILDREN**

Marie-Christine Ranger, *University of Ottawa*

Rose Martini, *University of Ottawa*

#### **Abstract**

**Background:** As families have moved away from traditional homemaker-breadwinner families to dual-earner families, time-use studies have shown these types of family to experience significant time constraints especially during their children's school years. These time constraints can result in less sleep and leisure which lead to greater stress in both individuals and families as a whole (Pronovost, 2015). The distribution of time in various occupations in accordance with one's values and within a health perspective is known as occupational balance (OB) and this has been found to be related to health and well-being of individuals (Matuska, 2012). OB has been explored principally from the perspective of individuals, usually the mother (Wagman, Håkansson & Jonsson, 2015) and sometimes the father as well (Wada, Backman & Forwell, 2015). In OB studies, the voice of children has only rarely been taken into account. When one considers the interrelated and interdependent nature of families, it becomes evident that for a true understanding of OB in families, the perspectives of all family members including children need to be obtained.

**Purpose:** This project aims to explore the meaning and lived experience of dual-earner parents and school-aged children as it relates to occupational balance. This study will use multiple perspectives to obtain a thorough understanding of family occupations and how their orchestration contribute to family occupational balance.

**Methodology:** This study adopts the method of phenomenology of practice as described by van Manen (2014). Individual family members' daily schedules, family occupational maps, photo-elicitation and phenomenological interviews are used to capture the complexity of occupation and occupational balance in families. Thematic analysis as well as existential analysis will be used to make sense of the preliminary results.

**Results and Implications:** The data collection for this PhD research is ongoing. The authors will present the preliminary results to date. The methodology used in this study highlights the combined complexity of occupational balance and obtaining multiple perspectives. It is anticipated that the results will point out how occupations of each family member affect the occupations of other family members and contribute to the occupational balance of both individual family members as well as the family as a whole.

**Key words:** Occupation, Occupational balance, Family

## References

- Matuska, K. (2012). Validity Evidence of a Model and Measure of Life Balance. *OTJR: Occupation, Participation and Health*, 32(1), 229-237. doi:10.3928/15394492-20110610-02
- Pronovost, G. (2015). *Que faisons-nous de notre temps? : Vingt-quatre heures dans la vie des Québécois : comparaisons internationales*. Presses de l'Université du Québec, 2015 Ottawa, Ontario : Bibliothèque numérique canadienne, 2015.
- van Manen, M. (2014). *Phenomenology of practice : meaning-giving methods in phenomenological research and writing*: Walnut Creek, California : Left Coast Press, 2014.
- Wada, M., Backman, C. L., & Forwell, S. J. (2015). Men's discursive constructions of balance in everyday life. *Community, Work & Family*, 18(1), 117-133.
- Wagman, P., Håkansson, C., & Jonsson, H. (2015). Occupational balance: A scoping review of current research and identified knowledge gaps. *Journal of Occupational Science*, 22(2), 160-169.

## **BELIEFS AND MISCONCEPTIONS ABOUT THE DIAGNOSIS OF AUTISM: UNDERSTANDING THE PERSPECTIVES OF LATINO PARENTS AND CAREGIVERS**

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Daniella C. Floríndez, *University of Southern California*

Dominique H. Como, *University of Southern California*

Sharon A. Cermak, *University of Southern California*

## **Abstract**

**Statement of Purpose:** Documented disparities exist regarding autism diagnosis for Latino children. When compared to White children, previous research has shown that Latino children are diagnosed at a later age (Mandell, Listerud, Levy, & Pinto-Martin, 2002), and experience difficulties with accessing necessary services (Angell, Frank, & Solomon, 2016; Zuckerman et al., 2014). Given these issues, it is necessary to explore what Latino parents, caregivers, and community members understand about the diagnosis of ASD. The purpose of this study is to identify the beliefs and misconceptions held by diverse, Los Angeles-based Latino families about the diagnosis of Autism Spectrum Disorder (ASD), and the psychosocial, familial, medical, and cultural factors that inform them.

**Methods:** As part of a larger qualitative study on in-home oral care, 18 Los Angeles-based Latino families with a child aged 6-12 (n=8 neurotypical, n=10 ASD) were interviewed. Each family was narratively interviewed twice in their native language (Spanish or English) for

approximately 1-2.5 hours each session. As a secondary line of questioning, families were probed to discuss their perceptions of ASD, including describing the disorder and their experiences involving ASD. Interviews were transcribed verbatim and analyzed by 3 coders using in vivo and thematic coding schemas to identify patterns across the data.

Results: Four themes pertaining to where Latino parents and caregivers obtained their knowledge and details about their beliefs about the diagnosis of ASD were identified. The first, Misconceptions, explained the various fallacies perpetuated in the Latino community about ASD, including that their child is “broken” or cursed. The second theme, Parents as students and teachers, described how parents had to learn about their child’s diagnosis to then be able to educate others and act as their child’s advocate. Following, Outside Influence clarified the information provided by non-family members, including health care providers, community members, or social network connections. The last theme, Cultural Stigma, focused on information that originated from the family’s cultural background, including religious and folk discussions, and influence of family members on sharing information and opinions, situating the ASD diagnosis within Latino culture.

Relationship to Occupational Science: Exploring how Latino parents, caregivers, and community members perceive Autism diagnosis will help illuminate how health information is communicated within this at-risk population, and inform the development of future targeted education and intervention programs. Further research is necessary to understand how these beliefs about ASD relate to quality of care and mitigating health disparities in this population.

### **Questions for Discussion**

1. What psychosocial, familial, medical, and cultural factors impact understanding of a diagnosis of ASD in Latino parents and caregivers?
2. How do these perceptions and misconceptions impact daily life for Latino families living with a child with ASD?

### **References**

Angell, A. M., Frank, G., & Solomon, O. (2016). Latino families’ experiences with autism services: disparities, capabilities, and occupational justice. *OTJR: Occupation, Participation and Health*, 36(4), 195-203.

Mandell, D. S., Listerud, J., Levy, S. E., & Pinto-Martin, J. A. (2002). Race differences in the age at diagnosis among Medicaid-eligible children with autism. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(12), 1447-1453.

Zuckerman, K. E., Sinche, B., Mejia, A., Cobian, M., Becker, T., & Nicolaidis, C. (2014). Latino parents' perspectives on barriers to autism diagnosis. *Academic Pediatrics*, 14(3), 301-308.

### **DOES SLEEP HYGIENE IMPROVE SLEEP PERFORMANCE AFTER BRAIN INJURY? A NARRATIVE REVIEW.**

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## **Abstract**

**Purpose:** The aim of this narrative review is to understand how sleep hygiene practices can improve sleep performance after brain injury and to highlight the role of occupational science in understanding the importance of sleep and sleep practices.

**Methods:** The method utilized for this presentation was a literature review of the sleep literature, specifically related to sleep hygiene and sleep interventions for individuals after traumatic brain injury (TBI). The literature review was performed using CINAHL Complete, Medline, and PsycINFO databases, and related search terms included sleep and traumatic brain injury, sleep hygiene and brain injury, and sleep interventions and brain injury. Selected articles and texts were relevant to the topic and peer reviewed.

**Discussion:** Prolonged sleep problems can negatively affect a person's physical and psychological well-being and can increase adverse symptoms of various health conditions, such as TBI. For individuals after TBI, sleep deprivation often causes changes in attention, memory, and learning and can lead to decreased participation in functional tasks (Duclos, Beauregard, Bottari, Ouellet, & Gosselin, 2015). Disruptions in sleep after TBI have also been linked to depression, anxiety, and decreased quality of life (Duclos et al., 2015). While there is limited evidence on the effectiveness of specific treatment options for sleep disturbances after TBI, sleep hygiene may be beneficial for this population and warrants further study (Nakopoulou et al., 2015). Sleep hygiene can be identified as a list of recommendations that encourage people to participate in behaviors that support good sleep and to avoid behaviors that interfere with normal sleep patterns (Stepanski & Wyatt, 2003), which may include modifying behaviors, routines, and/or environmental factors to promote improved sleep performance. Consistent sleep hygiene practices can significantly improve sleep performance for individuals with sleep disturbances after TBI, specifically when combined with other sleep interventions.

**Objectives:** 1) To understand the effects of decreased sleep on the brain injury population. 2) To understand the meaning and role of sleep hygiene in improving sleep performance after traumatic brain injury. 3) To highlight the importance of sleep from an occupational science perspective in regards to time-usage and participation in meaningful occupations

**Implications:** 1) From an occupational science perspective, one can attempt to understand the meaning and importance of sleep by evaluating how a person prepares for sleep and participates in sleep-related activities. 2) Sleep hygiene practices can be utilized, in combination with other sleep interventions, to improve sleep performance for individuals after brain injury.

**Key words:** sleep performance, sleep hygiene, traumatic brain injury

## **References**

Duclos, C., Beauregard, M., Bottari, C., Ouellet, M., & Gosselin, N. (2015). The impact of poor sleep on cognition and activities of daily living after traumatic brain injury: A review. *Australian Occupational Therapy Journal*, 62, 2-12. doi:10.1111/1440-1630.12164

Nakopoulou, E., Gaylarde, K., & Green, A. (2015). Sleep disturbance in neurological conditions. In A. Green & C. Brown (Eds.), *An occupational therapist's guide to sleep and sleep problems* (pp. 281-290). Philadelphia, PA: Jessica Kingsley Publishers.

Stepanski, E. J., & Wyatt, J. K. (2003). Use of sleep hygiene in the treatment of insomnia. *Sleep Medicine Reviews*, 7(3), 215-225.

## **EXPLORING YOUTH'S IMPLEMENTATION OF SLEEP HYGIENE STRATEGIES**

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Rose Martini, *University of Ottawa*

### **Abstract**

**Statement of purpose:** Many teenagers do not get enough sleep, leading to significant negative impact on their physical, psychological, and behavioral well-being (Owens, 2014). Adequate sleep hygiene practices can help by increasing sleep quality and quantity, however, little is known about how youth implement these strategies once they have been learned, and what barriers and facilitators they experience in the process. The aim of this qualitative study is to address this gap in literature by describing the experience of teenagers attempting to implement sleep hygiene strategies following individual intervention.

**Methods:** A descriptive case study design was used for this pilot project. The results from two typically developing high school age (grades 9 to 12) participants will be presented. Participants first completed a self-report sleep diary and the Sleep Hygiene Index (Mastin, Bryson, & Corwyn, 2006) and then participated in a semi-structured interview. The interview was transcribed and then a thematic analysis undertaken, guided by the Theory of Planned Behavior (Ajzen, 1991) as a theoretical framework.

**Results:** The results of this pilot project point to three overarching themes regarding the implementation of sleep hygiene strategies: “perceived power and self-efficacy”, “attitudes, behaviors, and knowledge” and “social influences”.

**Discussion/Implications:** Similarly to those described in the recent literature (Gibson & al., 2006), the participants in this study were found to be sleep deprived. The themes identified are also consistent with literature reviewed using the Theory of Planned Behavior with college students (Lao, 2016), in which healthy sleep patterns were associated with behavioral intention, attitude, and perceived behavioral control. These findings provide avenues for clinicians to explore and consider when working with youth experiencing sleep difficulties to help increase adherence with sleep hygiene recommendations.

**Key words:** teenagers, sleep, sleep hygiene, implementation, adherence

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Gibson, E. S., Powles, A. P., Thabane, L., O'Brien, S., Molnar, D. S., Trajanovic, N., Chilcott-Tanser, L. (2006). "Sleepiness" is serious in adolescence: Two surveys of 3235 Canadian students. *BMC Public Health*, 6, 116. <http://doi.org/10.1186/1471-2458-6-116>
- Lao, H. C. F., Tao, V. Y. K., & Wu, A. M. S. (2016). Theory of planned behaviour and healthy sleep of college students. *Australian Journal of Psychology*, 68(1), 20–28. <https://doi.org/10.1111/ajpy.12094>
- Mastin, David & Bryson, Jeff & Corwyn, Robert. (2006). Assessment of Sleep Hygiene Using the Sleep Hygiene Index. *Journal of behavioral medicine*. 29. 223-7 <https://doi.org/10.1007/s10865-006-9047-6>.
- Owens, J., Adolescent Sleep Working Group, A. S. W., & Committee on Adolescence, C. O. (2014). Insufficient sleep in adolescents and young adults: an update on causes and consequences. *Pediatrics*, 134(3), e921-32. <https://doi.org/10.1542/peds.2014-1696>

## LEAVING JOURNALISM: SELF-IDENTITY DURING CAREER TRANSITION FOR FEMALE FORMER KENTUCKY REPORTERS

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Anne Fleischer, *Eastern Kentucky University*

### Abstract

**Purpose:** This study sought to understand how leaving the field of journalism affected the life narratives of female print newspaper journalists from central Kentucky.

**Method:** Narrative thematic analysis was used to interpret three participant interviews. This design was appropriate because narrative stories, when collected by researcher, often tell of individual experiences and may give insight into people's identities and how they see themselves (Creswell, 2013).

After the study was approved by the institutional IRB, recruitment began through convenience sampling.

**Inclusion criteria included:** a) former female newspaper print journalist from central Kentucky, b) worked within the past 10 years in print journalism, and c) gathered news through source interviews and document analysis. **Exclusion criteria included** women who currently work at newspapers, or those who did not have reporting duties at the newspaper. The participants signed consent forms prior to the semi-structured 40-60-minute interviews. To preserve confidentiality, each participant was assigned a pseudonym.

The transcripts were interpreted using the following thematic analysis method developed by Braun & Clarke (2006): Transcripts were read through once, and general notes about what was in the data were written down. Transcripts were read through a second time and data-driven coding was conducted. Codes were sorted into potential themes. Relevant coded data extracts were collated into identified themes and sub-themes. All collated extracts were read for each theme and considered whether they appeared to form a coherent pattern. Transcripts were re-read to check for validity of the themes.

Results: Thematic data analysis revealed three overarching themes: self-identity as journalists persists after leaving newspaper jobs, other life roles took precedence over journalism when making the choice to leave, and journalism work was meaningful because of the personal affect it had on other people.

Discussion: The themes that emerged from the women's interviews about transitioning out of journalism provide a greater understanding of how vocational occupations affect self-identity and the meaningfulness of people's work during times of transition. From this study, it appears as if occupational self-identity may become more multi-layered over time, since previous occupational identity did not disappear after transitioning to another career. This study supported utilizing a life course perspective and Christiansen's (1999) definition of occupational identity for a better understanding of the data.

Key words: journalism, women, occupational identity

### **Questions for Discussion**

1. Understand the importance of qualitative narrative research in exploring the impact of career changes and disruptions for women.
2. Understand the various ways people find meaning and self-identity through the vocational occupations they practice, and how that changes or doesn't change during life transitions.
3. Understand the impact of context (social, cultural, temporal, physical) on the vocational choices women make and how that influences self-identity.

### **References**

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), 77-101.

Christiansen, C.H. (1999). Defining lives: Occupation as an identity: An essay on competence, coherence, and the creation of meaning (The Eleanor Clarke Slagle Lecture). *American Journal of Occupational Therapy*, 53, 547-558.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.

## **LONGITUDINAL ASSOCIATIONS BETWEEN CHILDREN'S SENSORY EXPERIENCES AND FAMILY OCCUPATIONS**

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Anne V Kirby, *The University Of Utah*

Linda R Watson, *University of North Carolina at Chapel Hill*

John Sideris, *University of Southern California*

John Bulluck, *University of North Carolina at Chapel Hill*

## **Abstract**

**Statement of Purpose:** This study aimed to understand the impact of early sensory experiences of children with autism spectrum disorder (ASD) and developmental disabilities (DD) on participation in everyday family occupations (i.e., home and community activities) and well-being of caregivers (i.e., strain as a potential barrier to engagement). Sensory experiences, including underresponsiveness, overresponsiveness, and sensory seeking, have been previously found to be associated with family occupations and well-being concurrently (Dickie et al., 2009; Kirby et al., 2015; Little et al., 2015); however, little is known about how children's sensory experiences may contribute to family participation over time.

**Description of Methods:** This study used a longitudinal descriptive design. We examined the prediction of sensory variables (measured with the Sensory Experiences Questionnaire 3.0 and Sensory Profile) to family outcomes (measured with the Caregiver Strain Questionnaire and Home and Community Activities Scale).

**Participants:** 81 children (ASD: n=50; DD: n=31), ages 2-12 years, and their caregivers.

**Data Collection:** Assessment was at two time points, approximately 3.3 years apart; sensory measures were collected at the first time point, and family outcomes at the second time point.

**Analysis:** Regression analyses tested longitudinal associations between sensory predictors and family outcomes.

**Results:** For families of children with ASD, high levels of sensory seeking and underresponsiveness at the first time point were associated with lower ratings of family participation in community, neighborhood social, and parent-child household activities years later. The opposite trend was seen for families of children with DD. Particularly high levels of strain were reported for caregivers of children with DD who displayed intense sensory seeking behavior. Caregiver strain was high for families of children with ASD and DD who showed underresponsive reactions to their environment [ $F(1, 67) = 6.32$ ;  $B(SE) = 0.58(0.23)$ ;  $p < 0.05$ ].

**Discussion/Implications for Occupational Science:** This research is important for occupational science because it contributes to existing knowledge on participation for families with a child with sensory needs (Boyd, McCarty & Sethi, 2014; DeGrace et al., 2014). It used a quantitative

approach to explore temporal aspects of occupational engagement, indicating that sensory experiences of children with ASD and DD may have both short and longer-term implications for family occupations and well-being. Additional occupational science research using a variety of methods is needed to understand the complex ways in which child and parent experiences may transact over time.

## References

- Boyd, B. A., McCarty, C. H., & Sethi, C. (2014). Families of children with autism: A synthesis of family routines literature. *Journal of Occupational Science*, 21(3), 322-333.
- DeGrace, B. W., Hoffman, C., Hutson, T. L., & Kolobe, T. H. (2014). Families' experiences and occupations following the diagnosis of autism. *Journal of Occupational Science*, 21(3), 309-321.
- Dickie, V. A., Baranek, G. T., Schultz, B., Watson, L. R., & McComish, C. S. (2009). Parent reports of sensory experiences of preschool children with and without autism: A qualitative study. *American Journal of Occupational Therapy*, 63(2), 172-181.
- Kirby, A. V., White, T. J., & Baranek, G. T. (2015). Caregiver strain and sensory features in children with autism spectrum disorder and other developmental disabilities. *American Journal on Intellectual and Developmental Disabilities*, 120(1), 32-45. doi: 10.1352/1944-7558-120.1.32
- Little, L. M., Ausderau, K., Sideris, J., & Baranek, G. T. (2015). Activity participation and sensory features among children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 45(9), 2981–2990. doi: 10.1007/s10803-015-2460-3

## **SLEEP OCCUPATION AS AN OPPORTUNITY TO RETHINK THE COMPLEXITY OF HUMAN OCCUPATION**

Lorena Leive, *University of Buenos Aires*

Rodolfo Morrison, *University of Chile*

### **Abstract**

Background: Sleep as a complex human occupation has been analyzed from many disciplines. However, many occupation definitions do not consider some specific characteristics which distinguish sleep. This theoretical essay intends to identify sleep characteristics that could contribute new dimensions to human occupation definitions, and is the first one in a doctoral thesis about occupational development of bedtime in the first years of life. In order to characterize bedtime in the context of sleep as human occupation, we found necessary to describe first of all sleep.

Methodology: Some occupation essential characteristics needed to be reviewed from sleep science bibliography: engagement, purpose, participation, the perception of a subjective event. The methodology utilized was narrative review.

Results: We found in sleep bibliography the following characteristics which allow us to review some occupation essential concepts. Sleep is a dynamic and continual process that involves orchestrated and synchronized tasks with a common purpose. These tasks are orchestrated in the same and different spaces, as well as synchronized in concurrent, sequential, or organized in an ongoing patterned format (Feldman, 2007). Participation in the occupation of sleep is evident during the process of falling asleep, waking up, and all of the tasks involved in preparation, adaptation, and/or modification of how, when, where, and with whom one sleeps (Williams, 2002). On the other hand, from the moment a person falls asleep to the moment he or she wakes up, the person is unconscious. Therefore, this period cannot be considered a purposeful task. Both sleep and waking are interdependent (Cirelli & Tononi, 2017). The integration of the various states of human consciousness is also evident in the dynamic processes involved in sleeping such as falling asleep or somnolence during waking hours (Noreika et al., 2017). It implies that humans move dynamically through different states of consciousness throughout the continuum of daily life. Sleep is influenced by the social, economic, cultural and historic context. Different sleep practices imply meaning and belonging (Glaskin & Chenhall, 2013). Sleep demands occupational development.

Conclusion: The identification of sleep characteristics suggests that the concept of human occupation would be revisited. We can view human occupation as the dynamic process of synchronizing tasks that are concurrent, sequential, or organized in an ongoing pattern; which tends to have a common purpose; and involves distinct and interdependent stages of consciousness characterized by periods that require participation and/or engagement and others that do not. Occupation is orchestrated in space and time within the diversity of daily occupations and throughout a person's life.

Key words: sleep, occupation, occupational science

## References

Cirelli, C., & Tononi, G. (2017). The Sleeping Brain. *Cerebrum*, June, 1–11.

Feldman, R. (2007). Parent-infant synchrony: Biological foundations and developmental outcomes. *Current Directions in Psychological Science*, 16(6), 340–345.  
<https://doi.org/10.1111/j.1467-8721.2007.00532.x>

Glaskin, K., & Chenhall, R. (Eds.). (2013). *Sleep Around the World*. New York: Palgrave Macmillan US. <https://doi.org/10.1057/9781137315731>

Noreika, V., Kamke, M. R., Canales-Johnson, A., Chennu, S., Mattingley, J. B., & Bekinschtein, T. A. (2017). Neurobehavioral dynamics of drowsiness. *BioRxiv*, 1–36.  
<https://doi.org/10.1101/155754>

Williams, S. J. (2002). Sleep and health : sociological reflections on the dormant society, 173–200.

# THE IMPACT OF MULTISENSORY ENVIRONMENTS ON CLIENT OUTCOMES: A SCOPING REVIEW

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## Abstract

Statement of purpose: To systematically analyze available research on the impact of Multisensory Environments (MSEs/Snoezelen) on improving the outcomes in different patient groups throughout the lifespan.

Description of methods (participants, data collection, analysis): Using Arskey and O'Malley's scoping review methodology, nine databases were searched (including CINAHL, ERIC, PsycINFO and others) using the keywords "snoezelen" or "multisensory environment". Inclusion criteria were: an experimental study design using a MSE, written in English, and published through December 2016. Two authors independently screened abstracts for inclusion. Full-text articles were retrieved and assessed independently by the reviewers; any disagreements on inclusion were settled via discussion until a consensus was reached.

Results: 2,145 articles were identified, with 84 meeting inclusion criteria. Study populations included: dementia (n=29), intellectual/developmental disabilities and/or autism (n=27), mental health diagnoses (n=9), care providers (n=6), traumatic brain injury (n=3), pregnancy (n=3), cerebral palsy (n=2), chronic pain (n=2), Huntington's disease (n=1), adults in palliative daycare (n=1), and typically developing children (n=1). MSEs were typically located in a private room; however, there were major differences in frequency, duration, stimuli used, and presence of caregivers/ healthcare providers across studies. There is a growing interest in MSE- related research, with 64% of articles published in the last decade. Only 20% of articles published were gold-standard randomized controlled trials, thereby highlighting the need for more rigorous research.

Discussion/implications as related to occupational science: Occupational science provides the opportunity to study how individuals occupy their time through participation in daily activities. For many, daily activities are defined by our individual roles, which can be greatly challenged or altered during a hospitalization, when diagnosed with a chronic, progressive disease, or different in healthcare settings (e.g. palliative day care). Beyond helping patients become more relaxed in healthcare settings, use of a MSE can contribute to an individual's occupational engagement during these changes in daily routines brought on by hospitalizations or disease diagnosis. The variety of outcome measures utilized (e.g. restraint use, seclusion, self-injury, social communication) throughout the studies represents different health activities in which patients typically participate, and the wide range of occupations that are part of their new narrative following the diagnosis or illness. Utilization of MSEs have the potential to improve relaxation, stress/ anxiety, functional outcomes, alertness, and mood, and thereby the potential to contribute



to improved occupational engagement in daily activities, including sleep and restoration, for different patient populations through the lifespan.

Key words: Multisensory environment, occupational engagement, health outcomes

### **Questions for Discussion**

- 1) To gain a better understanding of the utility of Multisensory Environments and identify the various populations and settings in which MSEs have been used.
- 2) To review the research of MSE interventions to improve occupational engagement and patient outcomes.

### **References**

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32.

Drahota, A., Ward, D., Mackenzie, H., Stores, R., Higgins, B., Gal, D., & Dean, T. (2012). Sensory environment on health-related outcomes of hospital patients. *The Cochrane Database of Systematic Reviews*, 3. DOI: 10.1002/14651858.CD005315.pub2.

Haegele, J., & Porretta, D. (2014). Snoezelen multisensory environment: An overview of research and practical implications. *Palaestra*, 28(4), 29-32.

Stein Duker, L.I., Chu, C., & Cermak, S. (In preparation). Multisensory environments to improve patient outcomes: A scoping review. *Disability and Rehabilitation*.

Yerxa, E. J. (1993). Occupational science: A new source of power for participants in occupational therapy. *Journal of Occupational Science*, 1(1), 3-9.

## **TRANSITION IN OCCUPATIONS OF REFUGEES DURING RESETTLEMENT**

Jacqueline-Elizabeth Cantrell, *Dominican University of California*

Kimberley Keegan Banuelos, *Dominican University of California*

Adam Chan, *Dominican University of California*

Jennifer Daine, *Dominican University of California*

Karen McCarthy, *Dominican University of California*

### **Abstract**

Purpose: In 2016, there were 22.5 million refugees worldwide (UNHCR, 2017). California resettled just over 5,000 of those 85,000 (Igielnik & Krogstad, 2017). Limited research has been

conducted in the United States (U.S.) focusing on the refugee experience; furthermore, there is a significant gap in research regarding the impact of the refugee experience on the occupations of refugees as they transition to living in the U.S. Smith (2012) explored the adaptation of cultural weaving among Karen refugees to maintain their previous occupations and the impact of daily weaving on their lives within Western culture; however, the study focused only on work occupations. This study seeks to capture the experience of refugees and the impact of this transition on a broad array of occupations. Adding to occupational science literature regarding the occupational impact of the refugee experience, as well as aiding in addressing issues of occupational justice (Townsend, & Wilcock, 2004).

**Methods:** This research is a qualitative-descriptive study. Data will be collected through semi-structured interviews. Questions are guided by Person-Environment-Occupation model (Law, et al., 1996), addressing personal and cultural values, environments where occupations are performed, and occupational patterns to identify changes in meaningful occupations due to the refugee process. Participants have legal status as refugees, have been in the U.S. between one and five years, resettled in Northern California, are at least 18 years old and are not required to speak English. As this study aims to capture a broad experience of transition and limit confounding factors influencing how the participant responds to changes in occupations, participants may be of any ethnicity, country of origin, or gender. Two participants were recruited through snowball sampling. Interviews were audio taped and transcribed. Interviews will be coded using thematic analysis to generate common themes across cases (Braun & Clarke, 2006). Rigor is strengthened through member checks and peer review.

**Potential Outcomes:** Two interviews have been completed and transcribed. The researchers are in the initial phases of data analysis, with completion of analysis by October 2018. Potential findings include in-depth information about the experience of occupations through transition. The researchers expect to find variance in lifestyle adjustment and changes to meaningful occupations.

**Implications:** This study aims to add to occupational science knowledge. Findings can potentially better-inform occupational therapy interventions for future refugees experiencing issues of occupational transition.

### **Questions for Discussion**

1. How does occupation play a role in transition?
2. How do cultural occupations change or remain the same during transition?
3. What are the internal and external supports and barriers to engaging in meaningful occupations during and after transition to a new county?

### **References**

- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Igielnik, R., & Krogstad, J. M. (2017). Where refugees to the U.S. come from. Retrieved from <http://scholar.aci.info/view/14bd17773a1000e0009/1555eafa64f00014c09>

Law, M., et al. (1996). The person-environment-occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy* 63(1) 9-23.

Smith, Y. J., Stephenson, S., & Gibson-Satterthwaite, M. (2013). The meaning and value of traditional occupational practice: A karen woman's story of weaving in the united states. *Work*, 45(1), 25-30. doi:10.3233/WOR-131600

Townsend, E., & Wilcock, A. (2004). Occupational justice and client-centered practice: A dialogue in progress. *Canadian Journal of Occupational Therapy*, 71(2), 7587.

## **FRIDAY, OCTOBER 13, 2018**

### **MORNING SESSION 1**

#### **75 SLEEP STARTER CLIENTS: COLLABORATIVE DESIGN OF FIRST-TIME OCCUPATIONAL SCIENCE-BASED INTERVENTIONS**

Doris Pierce, *Eastern Kentucky University*

#### **Abstract**

Intent: Describe a persuasive approach to introductory occupational science instruction, using intervention design collaborations with sleep starter clients and occupational science-based practice (OSBP).

Argument: Introductory students' simplistic view of competence creates resistance to studying occupation as a phenomenon separate from application. To develop students' understandings of occupational science at introductory levels, educators must compellingly tie knowledge of occupation to students' emerging identities as practitioners despite their lack of readiness for clinical settings.

Seventy-five occupational science seniors, in three sections of a design skills class, completed a seven-phase, semester-long collaboration with a sleep starter client. The sleep starter client was a person or persons with hopes for improved sleep: relative, friend, partner, couple, or caregiving dyad. The seven collaborative phases were: motivation, investigation, definition, ideation, idea selection, implementation, and evaluation. Strategies for each design phase were learned through readings, case discussions, and studio work on group projects before their use with sleep starter clients. Students worked with their starter client throughout the semester, usually providing and measuring the effects of the designed intervention for approximately three weeks. Starter client projects were presented in a finals poster session of 75 students.

Design skill development slowed during the investigation phase, in order to complete an OSBP analysis on the focus occupation of sleep. Lectures, readings, and assignments reviewed sleep across four levels of science: 1) descriptive research on sleep neurophysiology, environments, routines, and experiences; 2) relational research on how sleep shapes and is shaped by identity, relationship, health, and disability; 3) predictive research on large scale patterns of sleep, such as

developmental differences in sleep, cultural variation, disturbances/disorders, and co-morbidities, and 4) prescriptive research on interventions using or improving sleep, and sleep technologies and professions.

**Importance to Occupational Science:** According to Clark and colleagues (1991), occupational science emerged in response to occupational therapy's knowledge base needs, and application of the science is within the mission of the Society (2018). Transmission of the science to the profession through entry-level education is critical and requires innovative approaches.

Occupational therapists require a sophisticated understanding of sleep because it is essential to health, occupies a third of human lives, is foundational to waking occupations, and is commonly disrupted in the profession's service populations.

**Conclusion:** Intervention design in collaboration with a sleep starter client and using an OSBP analysis of sleep is a persuasive introductory approach to occupational science.

**Key words:** education, introductory occupational science, occupational science-based practice

### **Questions for Discussion**

1. Sleep takes up the largest proportion of our lives, is engaged in universally, is foundational to the quality of all waking occupations, and is essential to health. Is it, therefore, the most important type of occupation?
2. What differentiates a starter client from a typical occupational therapy client?
3. How does a highly collaborative and occupation-centered first intervention design experience influence occupational therapy students' perspectives on practice excellence or on their own future practice?

### **References**

Clark, F. A., Parham, L. D., Carlson, M. E., Frank, G., Jackson, J., Pierce, D., Wolfe, R. J., & Zemke, R. (1991). Occupational science: Academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy*, 45, 300-310.

Pierce, D. (Ed.) (2014). *Occupational science for occupational therapy*. Thorofare, NJ: SLACK Incorporated. ISBN: 9781556429330.

Society for the Study of Occupation: USA (April 25, 2018). SSO:USA mission. Retrieved April 25, 2018, from <http://www.sso-usa.org/mission>

## **SLEEP HYGIENE'S EFFECT ON REPORTED HOURS OF UNINTERRUPTED SLEEP IN OCCUPATIONAL THERAPY STUDENTS.**

John M. Bindo, *Gwynedd Mercy University*

### **Abstract**

**Statement of Purpose:** The objective of this report is to discuss the effects of sleep hygiene interventions on college age occupational therapy students in a university setting. Current sleep literature presents many challenges that may affect college students. A study conducted by the Centers for Disease Prevention and Control identified the following sleep related challenges when students were acquiring less than seven hours of sleep: difficulty concentrating on things and difficulty remembering things (Centers for Disease Control and Prevention, 2011). Interrupted sleep impairs brain functions, results in deficits with memory, and influences social interaction and daily functioning (Tester & Foss, 2018). It was hypothesized that sleep hygiene education will increase the amount of uninterrupted sleep. Memory consolidation occurs during uninterrupted sleep which in turn improves declarative memory (Fenn & Hamsbrick, 2012). Therefore, with an increase in uninterrupted sleep, a student is likely to increase memory consolidation which allows them to participate in formal education.

**Methods:** Eleven occupational therapy students at Alvernia University participated in a six-week research project. The participants were educated on sleep hygiene techniques developed by the Centre for Clinical Interventions. This provides the students with the option to either alter their environment or their daily routines (Centre for Clinical Interventions, 2016). Pre and post data was collected using the Pittsburgh Sleep Quality Index (PSQI). Paired t-test scores were analyzed to understand the effects of the intervention. In addition, comparative qualitative statistics were gathered utilizing a Demographic/Sleep Habit Questionnaire and a weekly Sleep Diary.

**Results:** The results did not indicate a significant change in the PSQI scores, nor did they report a significant increase in the hours of uninterrupted sleep. They did however, display positive qualitative changes. Students felt that having a dark room, decreasing consumption of alcohol/caffeine, decreasing nap times, and not exercising four hours prior to bedtime helped them sleep better. Future research is needed to evaluate the effectiveness of sleep hygiene interventions on improving uninterrupted sleep, and how this can directly impact memory.

**Implications:** The SSO:USA strives, “to foster understanding the fundamental nature of occupation in health and well-being” (Society for the Study of Occupation: USA, 2018). Occupational Science can identify unique challenges that college students face daily. Occupational Science research can uncover new insights and solutions to improve uninterrupted sleep which can improve memory through holistic sleep hygiene interventions. Increasing uninterrupted sleep will enable students to achieve an improvement in their memory, physical and psychosocial health, and well-being.

**Key words:** Sleep, Hygiene, Education

### **Questions for Discussion**

1. What are some ways that Occupational Science research can understand the relationship between sleep, memory, and occupation?
2. What ways can Occupational Science study the occupational challenges faced by college students who have diminished sleep?
3. Can current and future technology be utilized to further assess and improve quality of sleep?

## References

Centre for Clinical Interventions. (2016). Sleep hygiene. Retrieved February 1, 2016 from <http://www.cci.health.wa.gov.au>

Centers for Disease Prevention and Control. (2011). Morbidity and mortality weekly report. Effect of short sleep on daily activities. Retrieved October 19, 2015 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6008a3.htm>

Fenn, K.M. & Hambrick, D.Z. (2012). Individual difference in working memory capacity predict sleep-dependent memory consolidation. *Journal of Experimental Psychology*, 141, 404-410.

Society for the Study of Occupation: USA. (2018). Objectives. Retrieved March 12, 2018 from <http://www.sso-usa.org/objectives>

Tester, N.J. & Foss, J.J. (2018). Sleep as an occupational need. *American Journal of Occupational Therapy*, 72, 1-4.

## **AN OCCUPATIONAL SCIENCE PERSPECTIVE: THE ASSOCIATION OF SLEEP AND HAND FUNCTION IN CARPAL TUNNEL SYNDROME**

Angela Messer Goorman, *Eastern Kentucky University*

Doris Pierce, *Eastern Kentucky University*

Spencer Dawson, *Northwestern University*

Colleen Schneck, *Eastern Kentucky University*

### **Abstract**

**Purpose:** The purpose of this study was to test the hypothesis that sleep quality is positively associated with hand function above and beyond the association of pain and carpal tunnel syndrome (CTS) severity to hand function in clients with CTS. Although three prior studies demonstrated a correlation between CTS and sleep disturbances, they did not interface controlling for pain and CTS severity through electromyography and include an occupation-based hand function measure, thus limiting conclusions that may be drawn regarding the role of sleep in health and hand function in persons with CTS.

**Methods:** In this cross-sectional design, 53 adults diagnosed with CTS completed the Manual Ability Measure-20 (MAM-20), Pittsburgh Sleep Quality Index (PSQI), and a visual analogue scale (VAS) for pain. Electromyography (EMG) determined CTS diagnosis and CTS severity level.

**Results:** The mean Rasch-derived manual ability was 62.76, the mean pain level was 5.96, and the mean PSQI score of 10.15 was above the cutoff score of 5 for detecting disturbed sleep. Average sleep duration was six hours per night. Sleep quality was significantly negatively

correlated with manual ability: greater scores were associated with lower manual ability,  $r(53) = -.47, p = .001$ . Sleep disturbance was significantly positively correlated with pain: higher scores were associated with greater pain,  $r(53) = .364, p = .007$ . Both sleep disturbance and quantity were negatively correlated with manual ability: more disturbed sleep and shorter duration sleep were associated with lower manual ability,  $r's = -.354$  and  $-.276, p's = .009$  and  $.045$  respectively. Both sleep disturbance and quantity were positively correlated with pain: more disturbed sleep and shorter duration were associated with greater pain,  $r's = .378$  and  $.278, p's = .005$  and  $.044$  respectively. Sleep quality was significantly associated with manual ability after controlling for CTS severity and pain. Scores on the PSQI accounted for a unique 12.7% of the variance in manual ability.

**Importance to Occupational Science:** The essential contribution of occupation to health was demonstrated in this study through investigating sleep's unique role in the experience of daily hand function in persons with CTS, even when controlling for levels of pain and CTS severity. In keeping with the mission of the SSO:USA to support knowledge application, research is needed into how supports to sleep may shape recovery and hand function in clients with CTS. Further, this research contributes to an occupational science perspective on sleep, a little-studied and universally engaged occupation that occupies the largest proportion of human life.

**Key words:** Sleep Quality, Hand Function, Carpal Tunnel Syndrome

### **Questions for Discussion**

1. How can this study help to inform both occupational science and occupational therapy regarding the occupation of sleep?
2. How does this analysis of the relation of sleep quality and hand function in persons with CTS contribute to our understanding of the role of sleep in the hand function of other populations, such as shift workers or persons living with chronic pain?
3. How may we better identify and address sleep conditions that may influence hand function in clients with CTS?
4. What further research is suggested by these results?

### **References**

- Lehtinen, I., Kirjavainen, T., Hurme, M., Lauerma, H., Martikainen, K., & Rauhala, E. (1996). Sleep-related disorders in carpal tunnel syndrome. *Acta Neurologica Scandinavica*, 93, 360-365. <http://doi.org/10.1111/j.1600-0404.1996.tb00010.x>.
- Patel, A., Culberston, M., Patel, A., Hashem, J., Jacob, J., Edelstein, D., & Choueka, J. (2014). The negative effect of Carpal Tunnel Syndrome on sleep quality. *Sleep Disorders*, 1-7. <http://doi.org/10.1155/2014/962746>.
- Pereira, B. J., Pereira, V. C., Fonseca, R. G., Fernandes, T. D., Bertotti, M. F., & Resende, L. A. (2016). Sleep quality in patients with carpal tunnel syndrome. *Clinical Neurophysiology*, 127(9), e236-e237. <http://doi.org/10.1016/j.clinph.2016.05.066>.
- Pierce, D. (Ed.) (2014). *Occupational science for occupational therapy*. Thorofare, NJ: SLACK Incorporated. ISBN: 9781556429330

Wong, E., Chair, S., Leung, D., & Chan, S. (2014). Can a brief educational intervention improve sleep and anxiety outcomes for emergency orthopaedic surgical patients? *Contemporary Nurse*, 47(1), 4292-4321. <http://doi.org/10.5172/conu.2013.4292>.

## **EMPLOYING OCCUPATIONAL SCIENCE TO SUPPORT LIFESTYLE CHANGE INTERVENTIONS: TACIT KNOWLEDGE AND THRESHOLD CONCEPTS ?**

Elizabeth Larson, *University of Wisconsin-Madison*

### **Abstract**

**Intent:** This paper will propose tacit occupational therapy and occupational science knowledge that serves as threshold concepts integral to lifestyle change. These proposed concepts will be illustrated via examples from college students' lives (an exemplar of a transitional life stage where lifestyle is often reconstructed) and supported by current evidence.

**Argument:** Analyzing and addressing critical features and contexts of daily life occupations is essential to establishing sustainable changes in lifestyles. As occupational scientists and therapists we recognize that creating lifestyle changes is not as simple as knowing one should change but requires a systematic tailored personal plan along with persistent effort to enact that plan and overcome the inertia of ambivalence and ingrained habitual daily practices. Thus far, much of this knowledge has often been passed on in occupational therapy education as tacit knowledge, not fully articulated in its complexity and depth. Sadlo (2016) introduced the idea of threshold concepts in OS education; similarly this idea can be used to applying OS to lifestyle change. Threshold concepts transform the learner in that the new perspective causes a paradigmatic shift in thinking which is not reversible (Meyer & Land, 2003). The change alters thinking about the core concepts. This paper will describe well-known as well as tacit threshold occupational therapy and science concepts for lifestyle change and the current supporting interdisciplinary evidence in the case of college students. The following are proposed key threshold

**Concepts:** 1) Understanding occupational complexity is essential to lifestyle interventions Interventions must focus on current orchestration to successfully facilitate reorganization of occupations. 2) Occupational participation/in the moment engagement can promote health Motivation to change must overcome the inertia of staying the same as structured through habits, routines and lifestyles.

**Importance to Occupational Science:** This analysis will propose threshold OS concepts that may be applied to systematically design lifestyle change interventions, and provide the current evidence supporting these concepts (such as research on the importance of circadian rhythms, or in-the-moment health promoting effects of occupation).

**Conclusion:** Articulating threshold concepts that employ occupational therapy and science's complex and deep understanding of occupation and its orchestration can be useful in creating comprehensive and sustainable wellness programs.



## Questions for Discussion

1. What do you believe are the threshold concepts of OS?
2. What are our next steps?
3. What theoretical work do we need to do to move OS forward in addressing the critical issues of lifestyle change/wellness promotion?
4. Given that much of the evidence I've shared has been generated by other disciplines, what are our unique contributions to lifestyle change?

## References

Neely, M., Schallert, D., Mohammed, S., Roberts, R., & Chen, Y-J (2009). Self-kindness when facing stress: The role of self-compassion, goal regulation, and support in college well-being. *Motivation and Emotion*, 33, 88-97.

Orzech, K.M., Grandner, M.A., Roane, B.M., & Carskadon, M.A. (2015). Digital media use in the 2 h before bedtime is associated with sleep variables in university students. *Computers in Human Behavior*, 55, 43-50.

Roberts K.C., Danoff-Burg, S. (2010): Mindfulness and health behaviors: Is paying attention good for you? *Journal of American College Health*, 59:3, 165-173.

Sadlo, G. (2016) Threshold concepts for educating people about human engagement in occupation: The study of human systems that enable occupation, *Journal of Occupational Science*, 23:4, 496-509, DOI: 10.1080/14427591.2016.1228098

Wittmann, M., Dinich, J., Merrow, M., & Roenneberg, T. (2006). Social jetlag: Misalignment of biological and social time. *Chronobiology International*, 23(1-2), 497-509. DOI: 10.1080/07420520500545979

## MAKING SENSE OF OCCUPATION: A CALL FOR A MULTIDISCIPLINARY APPROACH

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### Abstract

Intent: The intent of this paper is to discuss the opportunity for occupational scientists to incorporate cognitive and neuroscientific theories of sensory processing into research on the sensory-environment relationship. It is a call to collaborate with a broader spectrum of respected disciplines theoretically and empirically, in order to develop a more comprehensive understanding of occupation related to sensory processing. Doing so will also help validate the perspectives of occupational science among others in the research community.

Argument: Sensory processing is a vital aspect of occupation (Williams, 2016). Individuals use their senses constantly to engage and participate with the world around them. Much potential exists for the discipline to more deeply explicate this process. Sensory processing has been

widely studied by other disciplines such as cognitive psychology and neuroscience. While these areas have largely remained separate from occupational science due to their more positivistic theoretical approaches, there is actually ample opportunity to bridge understanding in multiple different domains including meaning making, engagement, social participation, and adaptation. Advancements in neuroscience and technology are opening up opportunities for more contextual and embodied understandings of sensory processing. Therefore, occupational science should take advantage of this fruitful time in research to pursue collaborations on these ventures.

Importance to Occupational Science: Holistic, dynamic, and transactional approaches in the area of sensory processing to support occupation are within the expertise of our discipline. The paucity of collaboration across brain sciences represents a missed opportunity to explore how sensory aspects of occupation may relate to research in other disciplines. Doing so can help to strengthen interdisciplinary relationships and more widely disseminate the perspective occupational scientists can bring to research endeavors.

Conclusion: Sensory processing is a fundamental aspect of occupation because it enables engagement of individuals and the environment. It is both necessary and exciting to explore sensory processing more thoroughly from an occupational perspective that also incorporates a more current state of the science from neurocognitive research.

### **Questions for Discussion**

1. What potential opportunities for collaboration may exist between occupational scientists and cognitive psychologists/neuroscientists?
2. What are potential barriers to collaboration, and how can they be overcome?

### **References**

Williams, K. L. (2017). Understanding the role of sensory processing in occupation: An updated discourse with cognitive neuroscience. *Journal of Occupational Science*, 24(3), 302-313.

## **SCOPING REVIEW OF ASIAN PERSPECTIVES ON OCCUPATION IN ENGLISH-MEDIUM OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY JOURNALS: A CRITICAL TURN FOR CRITICAL APPROACHES**

Ben D. Lee, *University of North Carolina at Chapel Hill*

### **Abstract**

Statement of Purpose: The call for critiquing key concepts in occupational science and occupational therapy has been in place for quite some time. Hammell (2009) and Iwama (2003) have highlighted multiple Western cultural values embedded within occupational science and occupational therapy. Frank (2012) has implored occupational scientists and occupational therapists to think about their position in an increasingly transnational world, as well as the role research on occupations will have in their future endeavors. Are efforts to promote the diversification of perspectives on occupation occurring in 'reputed' English-medium, peer-reviewed journals? This scoping review explores the extent to which Asian perspectives on

occupation (e.g., non-Asians participating in occupations of Asian origin, Asians participating in occupations specific to their home country, Asians writing about their home/host country's cultural perspectives) have been discussed in English-medium occupational science and occupational therapy peer-reviewed journals from 2003 to 2016.

Description of methods: A scoping review using Arksey and O'Malley's (2005) guidelines was conducted on Asian perspectives on occupation in the occupational science and occupational therapy literature from 2003 (year of publication for Iwama's article) to 2016. Eight English-medium journals identified as 'high-quality' from a survey of occupational therapists were searched with OT Search and Scopus. The keywords 'culture,' 'cultural,' 'diversity,' 'Asia\*,' and 'migrant\*,' as well as authors' surnames were used to search for articles. Only voluntary (i.e., no forced migrants) migrants' perspectives were included.

Report of results: 26 articles met the selection criteria. These articles discussed Asian migrants' perspectives on occupation in Western countries, both Asians and non-Asians participating in occupations of Asian origin, the oft-discussed individualist-collectivist tension in many Asian societies, and applications of concepts such as occupational justice into the everyday lives of Asians. Japanese and Indian perspectives (both migrant and 'native') on occupation were prevalent, whereas other countries did not feature as often.

Implications related to occupational science: Results suggest that some Asian perspectives have been represented, but more diversity is required in the literature. If critical perspectives are to truly transform occupational scientists and occupational therapists' perspectives on research and practice in an increasingly transnational world, non-Western viewpoints must be brought into the discussion more frequently. Asian perspectives would also bolster ongoing discussions on the need for terminological unity and coherence within occupational science and occupational therapy (Hocking et al., 2008). Future studies could explore how an activity (e.g., drinking tea) differs across cultures to make said activity a culture-specific occupation.

### **Questions for Discussion**

1. Other disciplines are also encountering similar issues regarding the hegemonic status of English in peer-reviewed research, and the consequent difficulties that arise in exchanging knowledge. What can we learn from their experiences?
2. To what extent can occupational scientists and therapists who have spent extensive time studying and/or working in a 'foreign' country (i.e., not their country of origin) contribute towards articulating said country's perspectives on occupation?
3. Cross-cultural research on health and illness are already taking place in other disciplines. How can occupational scientists and occupational therapists join and contribute in such existing initiatives? Or, how can we raise the public profile of our own research that addresses similar questions and areas of inquiry?

### **References**

Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>

Frank, G. (2012). The 2010 Ruth Zemke Lecture in occupational science occupational therapy/occupational science/occupational justice: Moral commitments and global assemblages. *Journal of Occupational Science*, 19(1), 25–35. <https://doi.org/10.1080/14427591.2011.607792>

Hammell, K. R. W. (2009). Sacred texts: A sceptical exploration of the assumptions underpinning theories of occupation. *Canadian Journal of Occupational Therapy*, 76(1), 6–13. <https://doi.org/10.1177/000841740907600105>

Hocking, C., Pierce, D., Shordike, A., Wright-St. Clair, V., Bunrayong, W., Vittayakorn, S., & Rattakorn, P. (2008). The promise of internationally collaborative research for studying occupation: The example of the older women's food preparation study. *OTJR: Occupation, Participation and Health*, 28(4), 180–190. <https://doi.org/10.3928/15394492-20080901-02>

Iwama, M. K. (2003). Toward culturally relevant epistemologies in occupational therapy. *American Journal of Occupational Therapy*, 57(5), 582–588. <https://doi.org/10.5014/ajot.57.5.582>

## **RECONSTITUTING THE CONCEPT OF PLAY FOR PLAY SAKE: PLAY AS OCCUPATION**

Helen Lynch, *University College Cork*

### **Abstract**

Background: This paper presents the work of a COST European Project that supported research across 32 European countries from 2014-2018. COST is Europe's longest running funded programme to support trans-national research networking, to foster excellence in inter-disciplinary research. COST is an integral part of Europe's research programme for tackling societal challenges. The Ludi project was one innovative COST project, which consisted of a network of over 80 researchers and experts on the study of play and children with disabilities (TD-1309) ((Ludi, 2017). This paper presents a review of the Ludi project from the lens of play occupation.

Rationale for Ludi: Play for children with disabilities is a fragmented area of study, which has resulted in the development of varied disconnected, niche projects (e.g. social robotics or adapted toys for children with disabilities) (Besio & Carneshecchi, 2014). Yet play for children has been identified as a consistently neglected aspect of children's rights, especially for children with a disability. The Ludi Action was established with the aim of building awareness on the importance of play for children with disabilities by promoting and ensuring equity in their exercise of the right to play and, by putting play at the centre of multidisciplinary research and intervention. This paper presents core themes from Ludi, and discusses the need to articulate the concept of 'play for play sake', or play as occupation. Furthermore, the state of play in relation to occupational participation will be explored (Lynch & Moore, 2016; Lynch, Prellwitz, Schulze, & Moore, 2017; Ray-Kaesler & Lynch, 2016). A continuum for conceptualising play as work,

guided play and play occupation will be presented and implications for occupational science research will be explored.

Summary: Findings from the Ludi project established that there is a significant lack of knowledge about how to enable play participation for children with disability, across policy, play provision and practice in a European context. In addition, although rehabilitation specialists such as Occupational Therapists consider play as essential for health and well-being, therapists rarely focus on play as occupation..

The Ludi Action project has enabled practitioners and researchers in Europe to reconsider play, to articulate a clearer argument for enabling play as an occupation rather than play as an activity. As occupational scientists, we are encouraged to consider our contribution to what for many, is a newly developing field of study.

Key words: Ludi COST Action

### **Questions for Discussion**

1. The consideration of play activity as a separate concept to play as occupation- is this really needed?
2. How does this approach to play for play-sake, or play as occupation further our knowledge and research focus on play?

### **References**

Besio, S. & Carneshecchi, M. (2014). The challenge of a research network on play for children with disabilities. *Procedia Social and Behavioral Sciences*, 146, 9-14.

Lynch, H. & Moore, A. (2016) 'Play as an occupation in occupational therapy'. *British Journal of Occupational Therapy*, 79 (9):519-520

Lynch, H;Prellwitz, M;Schulze, & C;Moore, AH (2018). The state of play in children's occupational therapy: A comparison between Ireland, Sweden and Switzerland. *British Journal of Occupational Therapy*, 81 :42-50

Ludi ((2017). Position statement: the right to play is for children with disabilities too!. Accessed from: <https://www.ludi-network.eu/wp-content/uploads/2017/11/LUDI-Position-Statement.pdf>

Ray-Kaesler, S., & Lynch, H. (2016) 'Contribution of occupational therapy perspective to the promotion of play for the sake of play. In: *Play development in children with disabilities*, pp 190-205. China: De Gruyter (open access).

## **A MIXED-METHOD EXPLORATION OF ENGAGEMENT DURING THE OCCUPATION OF PLAY**

Cristin M. Holland, *University of Southern California*

## **Abstract**

Engagement in occupation has been described as complete immersion in the process and progress of activities, which is influenced by the nature of the activity, the state and preferences of the person involved, and the context in which the activity happens (Cynkin & Robinson, 1990). Lawlor (2003) describes children as “socially occupied beings” engaging in co-created occupations, where doing something with someone else constitutes occupational engagement. This pilot study attempts to explore social play to further understand how occupational engagement develops between social actors.

Twenty-two children between the ages of 30 months and 59 months ( $M = 46.5$  months) participated in play with a novel social partner. Social partners in this project were five female graduate students. Videotaped play interactions were examined through grounded theory methods adapted for video observations. This revealed a dynamic process of mechanisms used to create social play, which included bids for interactions, alignment and threats. The interaction of mechanisms led to four categories of interactive flow among dyads: discordant, discontinuous, continuous, and complete.

The interactions were then quantified on the resulting social interactive flow categories and two engagement scales. An engagement scale was developed from theories of co-occupation and consisted of the constructs highly interactive, co-created, shared physicality, shared intentionality, and shared (Pickens & Pizur-Barnekow, 2009). These constructs were operationalized into one (poor) to five (excellent) Likert-type scales. The Child Behavior Rating Scale was also used to probe engagement of the child during play (Mahoney & Perales, 2003). This scale operationalizes domains of activity initiation, social initiation, cooperation, and affect on a one (low) to five (high) Likert-type scale.

Correlation and regression methods were employed to investigate associations among constructs. Correlations revealed significant associations between all co-occupation constructs and interactive flow pattern. Interactive flow pattern was a predictor of all co-occupation constructs. Factors of the adult and of the child predicted various co-occupation constructs. Cooperation of the child was significantly associated with all co-occupation concepts and social flow pattern. Social initiation and cooperation were associated with interactive flow pattern, but only cooperation predicted interactive flow pattern. Quantifying co-occupation constructs and interactive flow patterns are valuable ways to probe engagement between social partners and appear to be inter-related. Additionally, results identify that both child and adult behaviors contribute to engagement during social play, supporting a transactional nature to engagement in occupation developed in previous occupational science literature (Dickie, Cutchin, & Humphry, 2006).

## **Questions for Discussion**

1. How does this study further the construct of occupational engagement?
2. How does this study further the construct of co-occupation?

## References

- Cynkin, S., & Robinson, A. M. (1990). Occupational therapy and activities health: toward health through activities. Boston: Little Brown & Company.
- Dickie, V., Cutchin, M. P., & Humphries, R. (2006). Occupation as transactional experience: a critique of individualism in occupational science. *Journal of Occupational Science*, 13(1), 83-93.
- Lawlor, M. C. (2003). The significance of being occupied: The social construction of childhood occupations. *American Journal of Occupational Therapy*, 57, 424-434.
- Mahoney, G., & Perales, F. (2003). Using relationship-focused intervention to enhance the social emotional functioning of young children with autism spectrum disorder. *Topics in Early Childhood Special Education*, 23(2), 74 – 86.
- Pickens, N. D., & Pizur-Barnekow, K. (2009). Co-occupation: Extending the dialogue. *Journal of Occupational Science*, 16(3), 151-156. doi: 10.1080/14427591.2009.9686656

## OCCUPATIONAL THERAPY IN AN EQUINE ENVIRONMENT FOR CHILDREN WITH AUTISM: A TRANSACTIONAL CASE STUDY

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Caitlin B. Peters, *Colorado State University*

Wendy Wood, *Colorado State University*

### Abstract

**Purpose:** We aim to present a transactional account of occupational therapy in an equine environment (OT<sup>ee</sup>) for children with autism spectrum disorder (ASD).

**Methods:** We adopted a case study approach (Creswell, 2013); the ‘case’ was 10 weeks of OT<sup>ee</sup> for seven children with ASD, provided by two occupational therapists. Data included videotapes of 21 OT<sup>ee</sup> sessions, field notes, and 10 interviews with the occupational therapists. Interview questions sought to understand the clinical reasoning guiding the design of OT<sup>ee</sup>.

We followed Ricoeur’s (1976) hermeneutic arc to analyze data through naïve interpretation, structural analysis, and comprehensive understanding. To provide a structural analysis of the videotapes and fieldnotes, we conducted a qualitative content analysis ([QCA]; Schreier, 2012). To capture the entire occupational situation (Humphrey & Wakeford, 2013) of OT<sup>ee</sup>, parent codes included occupational opportunities, actors, and architectural spaces. We achieved 96% interrater reliability on application of codes, and then calculated their frequencies, proportions, and sequences. To conduct a structural analysis of the interviews, we conducted theoretical thematic analysis (Percy, Kostere, & Kostere, 2015) through open, axial, and selective coding, ultimately creating a concept map. We conducted member checks and engaged in peer-review

for trustworthiness. Finally, to form a comprehensive understanding, we synthesized the individual parts of OT<sup>ee</sup> into a coherent whole, presented narratively.

**Results:** The QCA revealed six architectural spaces, seventeen occupational opportunities, and six actors. Children with ASD and occupational therapists performed 17 and 14 distinct actions, respectively. Figures display a general, yet individualized, sequence of events. A concept map delineates hypothesized mechanisms of change leading to targeted outcomes, including specific contributions of the horse and equine-related occupations. Following the hermeneutic arc, we moved between the fine details of structural analysis to our comprehensive understanding of the whole, creating a coherent narrative that presents a multiplicity of perspectives. Overall, OT<sup>ee</sup> was a holistic intervention that provided children with opportunities to practice a variety of skills while purposefully engaged in equine-related occupations. While sessions followed a general format, occupational therapists used affordances of specific environments and equine-related occupations to address individual goals.

**Implications Related to Occupational Science:** A transactional perspective in its truest form may be unattainable from a methodological standpoint, yet worthy of pursuit. This study sought to advance research methods in occupational science by operationalizing a transactional perspective of an occupational therapy practice scenario. Results also contribute to occupational science by elucidating the potential health-promoting power of equine-related occupations.

**Key words:** Transactional perspective; equine-assisted activities and therapies; autism spectrum disorder

### **Questions for Discussion**

1. We attempted to provide a transactional account of OT<sup>ee</sup>, but are confident that, in some ways, we have fallen short of the ideal of a transactional perspective. Do you have suggestions about how our account could be more transactional?
2. What value might operationalizing a transactional perspective of occupation bring to the discipline of occupational science?
3. This transactional account may serve as a basis for protocol development of OT<sup>ee</sup>; how might a transactional perspective, as opposed to more common reductionist approaches such as the use of fidelity checklists, influence protocol development of an intervention?

### **References**

- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Humphry, R., & Wakeford, L. (2013). Educational implications of taking a transactional perspective of occupation in practice. In M. P. Cutchin & V. Dickie (Eds.), *Transactional perspectives on occupation: An introduction and rationale* (pp. 215-228). New York: Springer.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76.



Ricoeur, P. (1976). *Interpretation theory: Discourse and the surplus of meaning* (6th ed.). Fort Worth, TX: The Texas Christian University Press.

Schreier, M. (2012). *Qualitative content analysis in practice*. Los Angeles, CA: Sage Publications.

## MORNING SESSION 2

### CONDITIONS INFLUENCING EVERYDAY PARENTING OCCUPATIONS: PAST, PRESENT, AND FUTURE CONSIDERATIONS

Chetna Sethi, *Towson University*

#### Abstract

**Background:** It can be argued that the family-focused literature within OS has viewed parenting as an individualistic and bidirectional approach to parent-child interactions. This current conceptualization is not fully able to capture the complexities that are associated with family beliefs and values, the multitude of social influences on parenting occupations, or the cultural world of parents as a whole. This paper, guided by the principals of life course sociology (Elder, 1998) and the transactional perspective (Dickie, Cutchin, & Humphry, 2006), aims to conceptualize parenting occupations as transactions among parents' historical contexts, their cultural situation as a whole, and their social roles.

**Methods:** The larger study explored how mothers, who were primary caregivers of typically developing children between the ages of 2 and 6, manage everyday interactions with their children and make decisions regarding everyday parenting. Charmaz's (2014) constructivist grounded theory methodology was used to analyze twenty-two interviews from twelve mothers using open, focused, axial, and theoretical coding in order to construct a framework of parental decision-making. The results presented here are one aspect of the larger study.

**Results:** In fulfilling their relational roles of being a caregiver, nurturer, educator, learner, and protector, mothers engage in many occupations. The factors that influence the management of multiple roles, as well as the engagement in multiple occupations are best understood through the exploration of a mother's past, present, and future conditions. This study revealed that past conditions include the mother's historical context including previous life experiences as well as intergenerational transmission of parenting practices. Present conditions were related to current events such as safety in the neighborhood, the overall family situation such as the presence of social support or socio-economic status, and personal traits of mother and child. Finally, the future conditions were described as the ultimate motivator for engagement in all occupations related to being a parent – to become a better mother, and to prepare the child for the real world.

**Implications for OS:** This study has several implications for occupational science. First, instead of studying parent-child relationships as an interaction that occurs at one cross-sectional point in time, the findings of this study revealed that it is more appropriate to study parenting as a

transaction encompassing the mothers' past, present, and future conditions. Further, the findings from this study attempt to understand mothers as more holistic occupational beings, including their historical contexts, their present socio-cultural situations, and their everyday parenting occupations.

### **Questions for Discussion**

1. How can the knowledge of mothers' past, present, and future conditions impact the manner in which we conduct research with families?
2. What are some innovative methods to research these holistic situations besides interviews and observations?
3. How might these conditions change or evolve over time or as a result of adversity?

### **References**

Charmaz, K. (2014). *Constructing Grounded Theory*(Second Edition). Thousand Oaks, CA: SAGE Publications Ltd.

Dickie, V., Cutchin, M., & Humphry, R. (2006). Occupation as transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 13, 83-93.

## **CHILDREN'S PERSPECTIVES ON MEALTIME OCCUPATIONS: CONNECTING WITH OTHERS**

Ashley E Mason, *University of North Carolina at Chapel Hill*

### **Abstract**

Statement of Purpose: Recently, occupational scientists have emphasized the importance of eliciting perspectives and experiences of occupation from people other than middle-class, adult females (Hocking, 2012). Surprisingly little research has been generated to specifically examine how particular occupations are experienced by children. In most studies, adults tend to provide their assumptions on child and family occupations without eliciting the child's perspective. The purpose of this study is to explore mealtime occupations from the child's perspective. Mealtime occupations, for most children, take place daily and in different contexts making it a particularly important occupation to study. Specifically, I examine the social nature of mealtime as demonstrated by children in two different contexts.

Methods: This paper draws on data from a larger collaborative ethnography examining children's mealtime occupations at home and school from four child participants between the ages of 9 -10 years old. My approach to data collection was grounded in a transactional approach to occupation (Cutchin & Dickie, 2012) and complimented by the cultural activity theory (Engeström, 1999). The methods for gathering data included: participant observation where I ate lunch at school and dinner at home with the child participants; brief audio-recorded interviews; photo elicitation about mealtime experiences at home; and drawings/collages created by participants about mealtime at home and school. I recorded field notes following observations

and transcribed the interviews. The data was analyzed by first coding and then identifying themes based on the children's experiences of mealtime.

**Report of Results:** The findings highlight the importance children place on connecting with friends and family during mealtime at school and home. The three main ways that children interacted with others during mealtime included: conversing, playing games, and sharing meals/food. The differences between how the children connected with others in each setting suggested a range through which social interaction occurred (e.g., active engagement at school where they constantly sought peer approval and more passive interactions at home where parents frequently directed conversation).

**Implications Related to Occupational Science:** The results highlight the importance children place on social interaction as well as the range of social connections that they engage in during mealtime depending on the supporting contexts. In emphasizing the children's perspective, this has particular implications that brief moments of connecting with others while eating is valued and is important in reinforcing relationships. Finally, the results suggest that children learn that mealtime occupations are social occupations from a relatively young age.

**Key words:** Children, Mealtime Occupation, Social Engagement

### **Questions for Discussion**

1. Consider other occupations that people engage in that can be private or public (or social) occupations. How does the social context shape those occupations in a given setting?
2. Consider your mealtime experiences across a given day. How does your relationship with the people you are eating with affect how you eat your meal?

### **References**

Cutchin, M. & Dickie, V. (2012). Transactionalism: Occupational science and the pragmatic attitude. In G. Whiteford & C. Hocking (eds.). *Occupational Science: Society, Inclusion, Participation* (pp. 24 – 37). Hoboken, N.J.: Blackwell.

Engeström, Y. (1999). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen & R.-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 377-406). New York: Cambridge University Press.

Hocking, C. (2012). Occupations Through the Looking Glass: Reflecting on Occupational Scientists' Ontological Assumptions. In G. Whiteford and C. Hocking (Eds.). *Occupational science: Society, inclusion, participation* (pp. 54-66). Hoboken, NJ: Wiley-Blackwell

## **EXPLORING ORAL CARE OCCUPATIONS OF LATINO CHILDREN WITH AND WITHOUT AUTISM**

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Evelyn Law, *University of Southern California*

Daniella C. Floríndez, *University of Southern California*

Leah I. Stein Duker, *University of Southern California*

Sharon A. Cermak, *University of Southern California*

Lucia I. Floríndez, *University of Southern California*

## **Abstract**

**Background:** Children from underserved minority populations, like Latinos, or children who have special health care needs such as Autism Spectrum Disorder (ASD), are at increased risk for oral health disparities (Fisher-Owens, Isong, Soobader, Gansky, Weintraub, Platt, & Newacheck, 2013). Dental routines can be especially difficult for children with ASD due to sensory sensitivities (Stein, Polido, & Cermak, 2012).

**Statement of Purpose:** The purpose of this study was to explore how Latino children with and without ASD perform in-home oral care activities, such as tooth brushing.

**Methods:** Eighteen Latino families with a child age 6-12 (n=8 neurotypical, n=10 ASD) were interviewed to identify factors that impact in-home oral care routines. Caregivers were asked to film their child performing oral care routines and activities for 3 days. Two blind coders analyzed 90 videos using a template coding approach based on the American Academy of Pediatric Dentistry's practice standards for recommended oral care behaviors. Videos were coded for the following: Preparation (toothbrush storage, correct amount of toothpaste, etc.); Brushing (brush at gum line, length of time, etc.); Supervision (type of instructions or assistance provided by caregiver); and additional oral care habits (use of mouthwash and/or floss). Qualitative observations were documented and analyzed using a cross-case analysis.

**Results:** Two themes were observed. The first, Parent Involvement, identifies how parents participate in their child's routines. The next, Sensory Modifications, describes adaptations made to the oral care routine to meet the sensory needs of children with ASD. It was also noted that consistent flossing was absent from the routines of both groups.

**Relationship to Occupational Science:** Children with ASD, especially those of minority descent, face a number of oral health disparities that make access to engagement in oral care occupations like tooth brushing challenging. This study clarifies the fact that tooth brushing often requires children with ASD and their families to co-construct ways to fully engage in this routine occupation. Understanding typical oral care routines while also considering the influence of the cultural contexts, child descriptors, and systemic restrictions on the activity will illuminate the particularities of how children with ASD engage in everyday occupations and contribute to the development of targeted interventions to improve in-home oral care routines in this population.

Discussion about how to facilitate better experiences for children with ASD aim to help mitigate the health disparities faced by this marginalized population.

Key words: Oral-Care, Latino, Autism

### Questions for Discussion

1. How is the occupation of tooth brushing similar among TD and ASD populations?
2. How do these oral care strategies impact the experience of everyday occupations for children with ASD?
3. How is engagement and participation in oral health affected by a diagnosis of ASD?

### References

U.S. Department of Health & Human Services (2010). Healthy People 2020, Oral Health: Overview, objectives, and interventions and resources. Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>

Fisher-Owens, S., Isong, I. A., Soobader, M., Gansky, S. A., Weintraub, J. A., Platt, L. J., & Newacheck, P. W. (2013). An examination of racial/ethnic disparities in children's oral health in the United States. *Journal of Public Health Dentistry*, 73(2), 166-174. doi: <http://dx.doi.org/10.1111/j.1752-7325.2012.00367.x>

Stein, L. I., Polido, J. C., and Cermak, S. A. (2012). Oral care and sensory over-responsivity in children with autism spectrum disorders. *Pediatric Dentistry* 35(3), 230-235.

Townsend, E., & Wilcock, A. (2004). Occupational justice and client-centered practice: A dialogue in progress. *Canadian Journal of Occupational Therapy*, 71(2), 75-87.

### **5MINUTES4MYSELF: A FEASIBILITY STUDY AND PRELIMINARY OUTCOMES OF AN APP-SUPPORTING OCCUPATION-BASED WELLNESS PROGRAM FOR CAREGIVERS OF CHILDREN WITH AUTISM**

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Rebecca Johnson, *University of Wisconsin-Madison*

Sophia Riffkin, *University of Wisconsin-Madison*

### Abstract

Statement of purpose: This presentation examines: 1) the quality and functionality of a newly-designed 5Minutes4Myself program companion app, and 2) the impact of the app delivered mindfulness modules on caregivers' perceived stress.

Description of methods: Fifteen caregivers parenting children with autism spectrum disorders, aged 8-21 years; not diagnosed with severe mental illnesses (except for depression) and who were willing to participate in a wellness program including mindfulness podcasts were recruited

for this feasibility study. A smartphone multi-platform app was developed to accompany the 5Minutes4Myself program; it was delivered to one cohort and then revised for a second cohort. This 4-month wellness program included a community-building meeting where pre-intervention surveys were completed, a lifestyle consultation using a manualized motivational interviewing guide with an activity card sort to design an individualized wellness program, monthly coaching, the app (using habit-building features such as tailored reminders, weekly goal check-ins, and mindfulness podcasts), and a closing meeting (post-evaluation surveys and focus group). Data analysis examined the app's usability and impact on caregivers' stress related to levels of mindfulness using data from the Five Facets of Mindfulness Questionnaire (FFMQ), Perceived Stress Scale (PSS), Modified Systems Usability Scale (MSUS), and selected focus group data. MSUS app ratings were averaged, and caregivers' qualitative feedback used to assess the app's usefulness. A hierarchical regression analysis examined the degree increases in mindfulness predicted post-intervention stress levels, controlling for pre-intervention stress levels.

Results: Caregivers' mean rating of the app was 76.7 on the Modified Systems Usability Scale (> 65 is above average usability & > 80 is the top 10% of all products tested using the SUS). Usability ratings improved from cohorts using the first version (M =70) to the second version (M = 84). While MSUS ratings show good/above average usability and user-friendliness, the focus group data suggests that further refinement is needed (e.g. sound editing of podcasts, app stability). Caregivers' changes in mindfulness over the intervention had a statistically significant impact on post-intervention stress levels when controlling for pre-intervention stress levels (p = .04). These changes in mindfulness accounted for 20% of the variation in post-intervention stress of caregivers, beyond the 54% accounted for by their pre-intervention stress levels.

Implications related to occupational science: This study demonstrates an approach to tailored, manualized occupation-based interventions for individuals with extensive time constraints; illustrates feasibility of app-based support; and demonstrates effectiveness of this program in reducing stress.

### **Questions for Discussion**

1. How can technology be leveraged to promote lifestyle change while not losing interpersonal supports needed for effective change?
2. What are the fewest and most essential elements necessary for delivering effective wellness interventions?

### **References**

Brooke, J. (1996). SUS: a 'quick and dirty' usability scale. In P. W. Jordan, B. Thomas, B. A. Weerdmeester, and I. L. McClelland (Eds.) *Usability Evaluation in Industry* (189--194). London: Taylor and Francis.

Cachia, R.L., Anderson, A. & Moore, D.W. J (2016). Mindfulness, stress and well-being in parents of children with autism spectrum disorder: A systematic review. *Journal of Child and Family Studies*, 25(1), 1-14. <https://doi.org/10.1007/s10826-015-0193-8>

Dykens, E. M., Fisher, M. H., Taylor, J. L., Lambert, W., & Miodrag, N. (2014). Reducing distress in mothers of children with autism and other disabilities: A randomized trial. *Pediatrics*, 134(2), e454–463. doi:10.1542/peds. 2013-3164

Ferraioli, S. J., & Harris, S. L. (2013). Comparative effects of mindfulness and skills-based parent training programs for parents of children with autism: Feasibility and preliminary outcome data. *Mindfulness*, 4(2), 89–101. doi:10.1007/s12671-012-0099-0

Rayan, A., & Ahmad, M. (2017). Effectiveness of mindfulness-based intervention on perceived stress, anxiety, and depression among parents of children with autism spectrum disorder. *Mindfulness*, 8(3), 677–690. <https://doi.org/10.1007/s12671-016-0595-8>

## **PARENTS OF CHILDREN WITH COMPLEX TRAUMA: OCCUPATIONS VIEWED THROUGH PHOTOVOICE**

Margaret Ingolia, *The Koomar Center*

Kate Barrett, *St Catherine University*

### **Abstract**

**Statement of Purpose:** Research in the field of complex trauma has focused extensively on the experiences of children, with less written about their parents' occupations. This qualitative study explored the occupations of parents whose children were diagnosed with complex trauma in order to better understand the day-to-day experiences and needs of the parents.

**Description of Methods:** A convenience sample of six parents of children with complex trauma, identified by mental health clinicians, participated in this Photovoice (Wang & Burris, 1997) study. All families received services through the same clinic. Occupations were defined as “doing, being, becoming, and belonging” (Wilcock & Townsend, 2014), and parents further defined each element of occupation to guide them in photo taking. Parents attended group meetings, took photos, and wrote narratives of them. The written narratives and meeting transcripts were analyzed using a modified Framework Analysis (Gale, Heath, Cameron, Rashid, & Redwood, 2013), and themes of parent experiences were developed. Parents provided feedback and suggestions for future actions.

**Report of Results:** Parents related significant difficulty considering their own experiences, rather than those of their children. They also described the meaning and benefits they derived through the process of participation in the study (Hammell, 2004; Hasselkus, 2011).

Developed themes for the doing element of occupation reflected the tasks and unrelenting responsibilities parents felt in their roles as parents. Being themes included past, present, and future identities and aspirations. Transformation and empowerment comprised themes of becoming, and belonging themes centered around communities within which parents felt understood. Aspects of time were woven among themes, and duality of experience was expressed in identity/loss of identify, strength/fear, and isolation/belonging.

Parents provided feedback that developed themes accurately represented their experiences. They expressed the wish for the results of this study to be disseminated to other stakeholders, including state agencies dealing with adoption and foster care, schools, and providers.

Implications Related to Occupational Science: This study contributes to the understanding of parenting as an occupation, specifically parenting children with complex trauma, one type of mental health difficulty. As it highlights the parents' perceptions of their experiences, it also addresses how societal expectations and perceptions impact their perceptions and experiences. Further, the study's focus group format facilitated parents' awareness and insights into their occupations, including the meaning they make of them.

Key words: Complex trauma, Parent occupations, Photovoice

### **Questions for Discussion**

1. Given the unrelenting responsibilities parents described in their parenting occupation, how might their ability to engage in restorative occupations be impacted?
2. How might we consider parenting as an occupation as similar to, or different from parenting children with complex trauma?
3. In light of the impact of children's complex trauma on the participants' parenting occupations, how might we begin to consider the impact of complex trauma on other participant occupations? Those of other family members?

### **References**

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13(117), 2-8.

Hammell, K. W. (2004). Dimensions of meaning in the occupations of daily Life. *Canadian Journal of Occupational Therapy*, 71(5), 296-305.

Hasselkus, B. R. (2011). *The meaning of everyday occupation* (2<sup>nd</sup> ed.). Thorofare, NJ: SLACK Incorporated.

Wang, C. & Burris, M.A., (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health, Education & Behavior*, 24(3), 369-387. doi: 10.1177/109019819702400309

Wilcock, A. A. & Townsend, E. A. (2014). Occupational justice. In H. S. Willard & B. A. Schell (Eds.), *Willard & Spackman's occupational therapy* (pp. 541-552). Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.

## **AN OCCUPATIONAL SCIENCE APPROACH TO TEACHING COMMUNITY-LEVEL OCCUPATIONAL THERAPY PRACTICE**

Antoine Bailliard, *University of North Carolina at Chapel Hill*



## **Abstract**

**Intent:** The purpose of this presentation is to introduce a course on community-level occupational therapy that bridges theory and practice by integrating an occupational science perspective.

**Argument:** In occupational science and occupational therapy, scholars and practitioners are increasingly attending to community-level and population-level concerns that affect health and wellbeing. Entry level occupational therapy programs provide their students with information about the steps to develop community-level occupational therapy interventions. We believe that effective community-level practice requires a sophisticated understanding of occupation, social systems and processes beyond what is traditionally offered by the medical model. Scholarship in occupational science can provide occupational therapy students with the necessary tools for analyzing community-level processes. At the University of North Carolina at Chapel Hill, we have developed a course, Community-Level Occupational Therapy Practice, using an occupational science perspective that is informed by multiple disciplines such as anthropology and sociology. Our aim is to provide students with a holistic and rich understanding of the intersection of social processes that impact occupation at the community-level. The course consists of two distinct phases; however, we continuously integrate lessons across phases as the course progresses. In phase 1, we introduce students to Bourdieu's theory of action and emphasize a critical perspective on how power relationships affect the occupational participation of groups and communities. Students are also introduced to research on belonging and how participation and collective/communal occupations foster experiences of community. After providing students with a critical understanding of participation at the macro-level, they enter phase 2 of the course which introduces the concrete steps for community-level program development (e.g., forming community partnerships, conducting a capacities assessment, program planning, evaluation, budgeting, and marketing). Throughout phase 2, we continue to draw on occupational science concepts integrating constructs from the theories introduced in phase 1. In groups, students develop a community-level occupational therapy program that is based on a real-world capacities assessment.

**Importance to occupational science:** We believe this course is a useful example for how to infuse occupational science into courses that focus on occupational therapy interventions. Such endeavors enhance occupational therapy and demonstrate the importance of occupational science scholarship.

**Conclusion:** Infusing occupational science scholarship into a course on community-level occupational therapy provides students with sophisticated understandings of social processes necessary for program development.

## **Questions for Discussion**

1. How have you integrated occupational scholarship into courses that focus on occupational therapy intervention?
2. What other theories might be used to frame an understanding of community occupation?

3. What challenges or barriers exist to incorporating occupational science into practice-focused occupational therapy courses?

## **UNDERSTANDINGS OF RESTORATIVE EXPERIENCES ASSOCIATED WITH DAILY ACTIVITIES AMONG COLLEGE STUDENTS**

Karen Adler, *Colorado State University*

### **Abstract**

**Statement of the Purpose:** College students, who are among those at greater risk for experiencing stress, have reported that they struggle finding time for renewal (Spreitzer & Grant, 2012). While occupational scientists believe occupation can influence health and well-being, little is known about the restorative nature of occupation. The aim of this presentation is to understand the restorative dimension of occupation through an investigation of college students' self-reported restorative experiences associated with daily activities using a 24-hour recall method. The primary research question was: do restorative experiences differ among the college students' daily activities?

**Methods:** Following IRB approval, 3418 randomly selected students (10% of total enrollment), with an active university e-mail account (inclusion criteria), were invited through e-mail to participate. Data were collected through a web-based survey, during a two-week period. The Perceived Stress Scale (Roberti, Harrington, & Storch, 2006), a subjective measure of stress, and the Daily Experiences of Pleasure, Productivity and Restoration Profile (Adler, 2015), a time-use assessment of objective and subjective dimensions of occupation were employed. Restoration was measured on a 7 point scale ranging from extremely renewed (experiencing my energy restored) to extremely drained. Downloaded time-use data were evaluated using quality indicators (Fisher & Gershuny, 2013). Next respondents' activities written in their own words were coded into 20 activity types, using a rigorous process with 3 coders who reached a 90% agreement. When engagement in an activity occurred more than once in the 24-hour period, restorative values were averaged, and used for analysis, nested within participant and activity. A hierarchical linear mixed effects statistical model was employed.

**Results:** Respondents (n= 264) ranged in age from 17-59 (M = 24.5, SD = 7), and 68% were undergraduates and 55% were female. Sleep was reported as the most restorative activity, but the average restoration for sleep did not significantly differ from eight activities including reading, hobbies, relaxing, eating, exercising, time with others, cooking and virtual games. Conversely, work was reported as least restorative (draining) activity and did not differ from mobility, commuting, homecare, class and studying.

**Implications Related to Occupational Science:** The findings of this study expand an awareness of the restorative dimension of occupation, and reinforce the importance of capturing subjective experiences associated with everyday activities. Continued examination of restoration may broaden our understanding of the therapeutic value of occupation, particularly in light of the increasing concerns in our society related to stress.

Key words: restoration, college students, subjective experiences

### **Questions for Discussion**

1. How might restorative experiences associated with activity vary based on different populations and contexts?
2. What other ways have or could occupational scientists use to study the restorative nature of everyday activities?
3. What role might occupational science play in promoting awareness of the importance of restorative experiences in the current society where stress, anxiety and burnout are increasing?

### **References**

Atler, K. (2015). User-perceived utility of the Daily Experiences of Pleasure, Productivity, and Restoration Profile. *Canadian Journal of Occupational Therapy*, 82, 235-244.

Fisher, K., & Gershuny, J. (2013). *Multinational time use study user's guide and documentation*(6 ed.). Oxford, UK.

Spreitzer, G. M., & Grant, T. (2012). Helping students manage their energy: Taking their pulse with the energy audit. *Exercises, Activities, and Simulations*, 36(2), 239-263.

Roberti, J. W., Harrington, L. N., & Storch, E. A. (2006). Further psychometric support for the 10-item version of the Perceived Stress Scale. *Journal of College Counseling*, 9(2), 135-14

## **HOME AS A RESTORATIVE PLACE: ILLUMINATING HOW STIGMATIZATION INFLUENCES THE OCCUPATIONAL EXPERIENCE AND WELL-BEING OF GAY MARRIED MEN**

William B. Wrightsman, *Touro University Nevada*

### **Abstract**

Statement of purpose: Most of what is known regarding the experience of marriage come from research using opposite-sex couples. The purpose of this study was to illuminate how gay men experience same-sex marriage in relation to societal norms and how these norms influence occupational experience.

Methodology: Interpretative phenomenological analysis (IPA) was the principal approach used for this research. IPA combines phenomenology, hermeneutics, and idiography, to understand how research participants perceive a particular life experience (Smith, Flowers, & Larkin, 2012). A purposeful sampling of three gay men, who were currently involved in same-sex marriage, was employed for this study. Fifteen hours of semi-structured interviews, artifacts, and reflexivity journaling were utilized for data collection. Line-by-line data analysis resulted in four primary themes, and member checking was utilized after initial data analysis to increase trustworthiness. The results presented are one facet of the larger study.

Results: An important outcome of this study was to add to the existing occupational science literature on sexual minorities by explicitly illuminating how stigmatization affects the experience of same-sex marriage and the occupations associated with marriage. Specifically, sexual prejudice was found to diminish the occupational experience of the participants, specifically within the context of marriage. Gay people navigate public space differently than heterosexual people. Participants were often hyper-vigilant, uncomfortable, or felt unwelcomed in public spaces, which influenced their occupational experience. Occupations experiences such as grocery shopping, exercising, or vacationing were altered or censored due to fear of bias and physical harm. Conversely, a revelation of this study was how marriage and the home environment act as a restorative buffer against the insidious influence of stigmatization. The home was a place where participants could escape heterosexual norms and the stress associated with rejection and discrimination.

Implications related to occupational science: The current study adds to the small but growing body of occupational science research on the occupational experience of queer people. This study extends prior research (Bailey & Jackson, 2005; Devin & Nolan, 2007; Jackson, 1995) by illuminating gay men's experience with same-sex marriage and its associated occupations. The most noteworthy aspect of this study was the recognition that though the lesbian, gay, bisexual, transgender, and queer community has made continual legal progress in this country, sexual prejudice and stigmatization endures and continues to impact all aspects of the participants' lives, including the occupational science constructs of occupational choice, experience, and behavior, specifically within the context of same-sex marriage.

Key words: Same-sex marriage, stigmatization, occupational experience

### **Questions for Discussion**

1. Research indicates that one's desire for acceptance is a strong motivator to change personal behavior. In light of this information, how does an LGBTQ person balance their yearning to be accepted by the normative culture with their desire to embrace their authentic self?
2. What is the relation between sexual prejudice and becoming?
3. What are the implications of chronic sexual minority stress and restorative occupations?

### **References**

Bailey, D., & Jackson, J. (2005). The occupation of household financial management among lesbian couples. *Journal of Occupational Science*, 12(2), 57-68. doi: 10.1080/144227591.2005.9686549

Devine, R., & Nolan, C. (2011). Sexual identity & human occupation: A qualitative exploration. *Journal of Occupational Science*, 14(3), 154-161. doi: 10.1080/14427591.2007.9686596

Jackson, J. (1995). Sexual orientation: Its relevance to occupational science and the practice of occupational therapy. *American Journal of Occupational Therapy*, 49(7), 669-679. doi: 10.5014/ajot.49.7.669

Smith, J. A., Flowers, P., & Larkin, M. (2012). *Interpretative phenomenological analysis: Theory, method, and research*. Thousand Oaks, CA: Sage.

## **HOW MEANING DEFINES RESTORATIVE OCCUPATIONS AND LEADS TO OCCUPATIONAL BALANCE**

Jenn Soros, *Nova Southeastern University*

### **Abstract**

**Intent:** This theoretical paper will present the current understandings of restorative occupations, meaning, and occupational balance in occupational science. The discussion will use occupational science theories of occupational balance, occupational imbalance, and meaning to understand the subjective definition of restorative occupations. The discussion will address the transactional relationship of meaning, restoration, and occupational balance.

**Argument:** Waking restorative occupations include quiet-focus activities, self-care activities, eating and drinking, and spiritual activities. There is a strong connection between the meaning of an occupation and its restorative properties. The connection to meaning helps to define the subjective nature of restorative occupations. By engaging in restorative occupations, this allows one to perform other required daily activities. The need to engage in restorative occupations so one can perform other productive occupations is critical to occupational balance. The meaning behind the restorative occupations that people choose to engage in enhances the understanding of occupational balance. When assessing occupational balance, it is important to look at how time, roles, psychological needs, and biological rhythms enhance or hinder the desire to achieve occupational balance.

**Importance to Occupational Science:** Meaning and occupational balance are important theoretical principles in occupational science. The relationship of meaning to restorative occupations addresses a person's physical, mental, and spiritual needs. The occupational science perspective on the engagement in restorative occupations is important to understand the benefits of restorative occupations as well as the effect on well-being.

**Conclusion:** There is a connection to the meaning of an activity and the restorative properties of the activity. It is through the meaning that simple, repetitive, even mundane activities can become highly valued restorative occupations. The restorative properties of the occupational experience do not function as the other constructs of the occupational experience, productivity, and pleasure. There is limited research on restorative occupations. This is due in part to the highly subjective nature of restorative occupations. The benefits of restorative occupations need to be further explored to assess the connection to the occupational experience. Further research is needed to assess how restoration relates to the occupational experience as well as the effects on well-being.

### **Questions for Discussion**

1. What defines restorative occupations?

2. What aspects enhance or inhibit occupational balance?
3. How do restorative occupations contribute to occupational balance?
4. What is the connection between restorative occupations, meaning, and occupational balance?

## **References**

Christiansen, C. H., & Matuska, K. M. (2006). Lifestyle balance: A review of concepts and research. *Journal of Occupational Science*, 13(1), 49-61. doi:10.1080/14427591.2006.9686570

Hammell, K. W. (2009). Self-care, productivity, and leisure, or dimensions of occupational experience? Rethinking occupational “categories”. *Canadian Journal of Occupational Therapy*, 76(2), 107-114.

Nurit, W., & Michal, A. B. (2003). Rest: A qualitative exploration of the phenomenon. *Occupational Therapy International*, 10(4), 227-238.

Pierce, D. (2001). Occupation by design: Dimensions, therapeutic power, and creative process. *American Journal of Occupational Therapy*, 55(3), 249-259.

Wilcock, A. A., & Hocking, C. (2015). *An occupational perspective of health* (3rd ed.). Thorofare, NJ: Slack Incorporated.

## **AFTERNOON SESSION**

### **FORUM:**

#### **EMBEDDING OS RESEARCH IN AN ENTRY-LEVEL OT PROGRAM: INSIGHT AND OPPORTUNITY**

Linn Wakeford, *University of North Carolina at Chapel Hill*

Nancy Bagatell, *University of North Carolina at Chapel Hill*

Ryan Lavalley, *University of North Carolina at Chapel Hill*

### **Abstract**

**Aims:** The purpose of this session is to describe the experiences of faculty in one entry-level occupational therapy (OT) program in which student research projects have included a focus on topics including the relationship between occupation and identity, and occupational choice/occupational justice. Content will include student and faculty learning from these projects, and ways in which the opportunity to do occupational science (OS)-related research may help students make connections between OS and OT.

Rationale: Enacting occupation-based practice and understanding occupation in multiple ways are among the primary learning objectives for entry-level OT programs, as are the use and conduct of research. However, it can be challenging to foster in students an appreciation for the roles that OS research can play in their professional lives.

In one MSOT program, student research developed around the relationship between occupation and identity (Laliberte-Rudman, 2002) led to the exploration of women in roller derby, young adults in role-play games, Latino males playing soccer, retired persons doing community gardening, and urban homesteaders. Across these studies, occupation related to identity in four key ways: 1) the affordance offered for the expression of core values and beliefs, 2) the socio-cultural space that allowed participants to feel a sense of belonging, 3) connecting past and present, and 4) the importance of “place.”

Occupational choice (Galvaan, 2015) as a theme resulted in research that included the educational choices of Black male college students, life choices of siblings of individuals with disabilities, factors influencing the choice of Post-911 veterans to use VA educational benefits, and parental influence on first-generation college students' choice in higher education. Across these studies, ideas were revealed about the relationships among occupational choice and obligations to one's self and others, access to opportunity, influence of family members, one's past experiences, and one's future aspirations.

Findings of these studies may not be surprising, but the process provided scaffolding for students to hear, think deeply about, and come to a new understanding of occupation. Faculty experience with this process has yielded a recognition of OS-related research as a potentially powerful tool for helping OT students connect with OS.

Outcomes: Potential outcomes for participants include opportunities to discuss the ways in which OT students can come to value the contributions of OS, the existence of need for OTs and occupational scientists to have common understandings, and the ways in which faculty can support OT student learning related to OS.

### **Questions for Discussion**

1. What are audience/colleagues' opinions on the idea of student engagement in OS-related research as a tool to improve awareness of connections between OS and OT
2. In what ways could we investigate this further, in order to determine whether or not this process is actually supporting greater awareness of connections between OS and OT, and if so, what are the most salient components of the process?
3. Are there other ways in which entry-level programs are helping students make the OS/OT connections?
4. To what extent do future practitioners need to understand and value the work being done in occupational science?

### **References**

Galvaan, R. (2015). The Contextually situated nature of occupational choice: Marginalized young adolescents' experiences in South Africa. *Journal of Occupational Science*, 22, 39-53.

Laliberte-Rudman, D. (2002). Linking occupation and identity: Lessons learned through qualitative exploration. *Journal of Occupational Science*, 9, 12-19.

## **UNCOVERING CONNECTIONS BETWEEN ENGAGEMENT IN MEANINGFUL ACTIVITIES AND PSYCHOLOGICAL WELL-BEING IN INDIVIDUALS LIVING IN POVERTY**

Laura Schmelzer, *The University of Toledo*

Adam Newcomer, *The University of Toledo*

Ashley Koralewski, *The University of Toledo*

### **Abstract**

**Statement of Purpose:** Examining the relationship between well-being and engagement in meaningful activities is an important focus within Occupational Science. Exploration into the perspectives of well-being and how those perspectives relate to meaningful engagement for those living on the outskirts of society is occurring and highlights the need for further research (Thomas, Gray, & McGinty, 2017). The WHO-5 Index is a well-recognized questionnaire that measures subjective psychological well-being (Topp, Ostergaard, Sondergaard, & Bech, 2015). Likewise, the Engagement in Meaningful Activities Survey (EMAS) demonstrates validity in assessing the diverse concepts that surround meaning (Eakman, 2012). This study utilized these two measures as well as a demographic questionnaire to explore the relationship between psychological well-being and meaningful engagement within a diverse sample of adults.

**Methods:** Recruitment occurred through local agencies serving people living in poverty. Data collection followed at events hosted by collaborating agencies. Descriptive statistics were used to illuminate demographic information while a t-test was used to investigate differences between groups. Correlational analysis was used to examine the relationships between the variables.

**Results:** Data were collected from 109 participants. Eight data collection packets were completely removed from the analysis due to the amount of missing data, leaving an n=101. Demographic information revealed the majority of the participants were female (65%) and had an annual income < 19,999 (52%). Additionally, Caucasian participants only represented 22% of the sample. Spearman's correlation resulted in a positive moderate association between engagement in meaningful activities and psychological well-being ( $r = .512$ ,  $p = .000$ ). Further exploration into the relationship between meaningful engagement and well-being revealed that people with an annual income of >20,000 ( $n=37$ ) connected activities which help them take care of themselves, express creativity, contribute to feeling competent, give pleasure, and have just the right amount of challenge to their psychological well-being ( $r = .42 - .64$ ,  $p < .05$ ). In contrast, people making < 19,999 annually reported the strongest associations to psychological well-being with activities that help express personal values ( $r = .36$ ,  $p = .01$ ) and give a sense of satisfaction ( $r = .40$ ,  $p = .01$ ).



Implications for Occupational Science: These findings indicate that those living in poverty have a diminished scope of experience with meaningful engagement that contributes to psychological well-being when compared to individuals with more financial resources. Attention to concepts of occupational alienation and occupational justice (Nilsson, & Townsend, 2010) are needed to further explore these associations.

### Questions for Discussion

1. How could a limited scope of experience with activities that contribute to meaningful engagement influence occupational capacities and identity construction? Are there implications when considering generational poverty?
2. How can an occupational justice lens inform discussions at the population level and substantiate the need for occupation-based programs to combat occupational alienation?
3. How can occupational scientists address the apparent disconnect between meaningful engagement in rest and restoration (activities that help me take care of myself) and psychological well-being for individuals living in poverty?

### References

- Eakman, A. M. (2012). Measurement characteristics of the Engagement in Meaningful Activities Survey in an age-diverse sample. *American Journal of Occupational Therapy*, 66, 20-29. doi:10.5014/ajot.2012.001867
- Nilsson, L. & Townsend, E. (2010). Occupational justice – Bridging theory and practice. *Scandinavian Journal of Occupational Therapy*, 17(1), 57-63. doi:10.3109/11038120903287182
- Thomas, Y., Gray, M. A., & McGinty, S. (2017). The occupational wellbeing of people experiencing homelessness. *Journal of Occupational Science*, 24(2), 181-192. doi:10.1080/14427591.2017.1301828
- Topp, C. W., Ostergaard, S. D., Sondergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A systematic review of the literature. *Psychother Psychosom*, 84(3), 167-176. doi:10.1159/000376585

## ALLOSTATIC LOAD AS PHYSIOLOGICAL INDICATOR OF OCCUPATIONAL IMBALANCE

Raymond Hernandez, *University of Southern California*

### Abstract

Intent: To argue for the importance of the consideration of allostatic load (the metabolic wear and tear that results from stress) as a physiological indicator of occupational imbalance, one of the uses of which may be in clarifying the connection between occupational imbalance and stress related symptoms such as sleep disturbances.

Argument: The stress response is, in essence, an increase in arousal level to help the body cope with perceived stressors (Sterling & Eyer, 1988). The body, however, is not optimized to remain in a high arousal state for an extended period; thus, allostatic load, or the metabolic wear and tear that results from repeated exposure to stress, accumulates if one engages in an excess of arousal-inducing occupations (McEwen & Stellar, 1993). Allostatic load is typically calculated by measuring a variety of physiological parameters that are believed to be sensitive to chronic stress and to be possible indicators of dysfunction, including cardiovascular biomarkers (e.g. systolic blood pressure and cholesterol), metabolic biomarkers (e.g. hemoglobin A1c and body mass index), and immunological biomarkers (e.g. C-reactive protein and white blood cell count) (Duong, Bingham, Aldana, Chung, & Sumner, 2017). As the amount of metabolic wear and tear accumulates, theoretically, the degree of severity of stress-related symptoms increases (Maloney, Boneva, Nater, & Reeves, 2009). For example, research has demonstrated an association between a high allostatic load score and sleep disturbances such as insomnia (Chen, Redline, Shields, Williams, & Williams, 2014). We posit that high levels of allostatic load and corresponding stress-related symptoms may be a consequence of occupational imbalance, which we conceptualize as engagement in an excess of arousal-inducing occupations and/or insufficient engagement in arousal-reducing occupations.

Importance to Occupational Science: Consideration of allostatic load may provide a more complete representation of occupational balance, in combination with other approaches to understanding occupational balance such as time spent in various categories of occupation, and the subjective experience of engagement in occupation. Furthermore, this approach may facilitate collaboration with academic fields that typically include objective measures such as biomarkers in representations of aspects of lived experience. Allostatic load may be one way to translate the subjective lived experience of occupational imbalance into the reductionistic language used by other fields to encourage greater interdisciplinary exchange.

Conclusion: Considering allostatic load in the study of occupation may help clarify the connection between occupational imbalance and the development of stress-related symptoms such as sleep disturbances, help to represent occupational balance, and aid in promoting greater interdisciplinary exchange.

Key words: allostatic load, chronic stress, occupational balance

### **Questions for Discussion**

1. What are some obstacles to use of the concept of allostatic load in the study of occupation?
2. Are there any other potential uses of the concept of allostatic load in the study of occupation?
3. How has allostatic load been utilized in the study of occupation in the past?
4. In terms of dissemination of ideas about the connection between allostatic load and occupation, to which parties do you think dissemination should be focused? (e.g. just OTs or healthcare professionals in general?)
5. What do you think about the assertion that using more reductionistic data in the study of occupation may help to promote greater interdisciplinary exchange?

## References

- Chen, X., Redline, S., Shields, A. E., Williams, D. R., & Williams, M. A. (2014). Associations of Allostatic Load with Sleep Apnea, Insomnia, Short Sleep Duration, and Other Sleep Disturbances: Findings from the National Health and Nutrition Examination Survey 2005-2008. *Annals of Epidemiology*, 24(8), 612–619. <https://doi.org/10.1016/j.annepidem.2014.05.014>
- Duong, M. T., Bingham, B. A., Aldana, P. C., Chung, S. T., & Sumner, A. E. (2017). Variation in the calculation of allostatic load score: 21 examples from NHANES. *Journal of Racial and Ethnic Health Disparities*, 4(3), 455–461.
- Maloney, E. M., Boneva, R., Nater, U. M., & Reeves, W. C. (2009). Chronic fatigue syndrome and high allostatic load: results from a population-based case-control study in Georgia. *Psychosomatic Medicine*, 71(5), 549–556. <https://doi.org/10.1097/PSY.0b013e3181a4fea8>
- McEwen, B. S., & Stellar, E. (1993). Stress and the individual: mechanisms leading to disease. *Archives of Internal Medicine*, 153(18), 2093–2101.
- Sterling, P., & Eyer, J. (1988). Allostasis: A New Paradigm to Explain Arousal Pathology. *Handbook of of Life Stress, Cognition and Health*.

## THE RELATIONSHIP OF OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY: A SCOPING REVIEW

Susan Szendrey, *University of North Carolina at Chapel Hill*

### Abstract

**Purpose:** The purpose of this review is to examine how the relationship between occupational science and occupational therapy has been discussed. Since the formal establishment of occupational science as a discipline, its relationship to occupational therapy has been debated. Early in its founding, occupational science was described as a basic science in the service of occupational therapy practice. Since then, many authors have offered their opinions on what the nature of the relationship should be. Currently, there is a need for an up-to-date systematic assessment of the literature published on this issue.

**Methods:** Guided by Arksey and O'Malley (2005), this review was intended to investigate the range of literature that discusses the relationship between occupational science and occupational therapy. The review was completed by utilizing a combination of searching methods, including: examining two electronic article databases, hand searching reference lists of identified literature, and utilizing a personal collection of books and articles. The sources included in review directly addressed the relationship between occupational science and occupational therapy; articles focused on case studies or practice frameworks applying occupational science into therapy were excluded due to their lack of information on describing the nature of the relationship between occupational science and occupational therapy.

Results: A search of the literature returned 40 articles and books explicitly addressing the relationship between occupational science and occupational therapy. Publication frequency on this topic has remained steadily relevant from 1989 until present day. Themes found in the literature were: basic versus applied science, occupational science as translational research, occupational science concerning occupational therapy practice, interdisciplinarity, and a separate versus mutually beneficial relationship. These themes highlighted the complexity of this issue and how minor differentiations in opinion can lead to tension. Six studies utilized empirical data to inform their argument while 34 sources were theoretical or reflective in nature. Results demonstrated that this conversation is more nuanced than just debating whether occupational science and occupational therapy should or should not be partitioned.

Implications for OS: Occupational science and occupational therapy are often viewed as positively connected, though some caution to what degree this should remain. Key differences lie in how scholars view the priorities of occupational science. In order to make the conversation surrounding this debate more robust, more publications informed by empirical data are suggested. As major shifts are occurring in occupational therapy education, it is imperative occupational science reexamines its place within those programs.

Keywords: occupational therapy, symbiotic relationship, education

### Questions for Discussion

1. What views are not currently captured in the published literature?
2. How do we move the conversation forward with more empirical data? What other ways will progress this debate?
3. In a changing occupational therapy education landscape, what role does occupational science play, if any?

### References

- Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32. doi: 10.1080/1364557032000119616
- Clark, F., Parham, D., Carlson, M. E., Frank, G., Jackson, J., Pierce, D., ... Zemke, R. (1991). Occupational science: Academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy*, 45(4), 300-310. doi:10.5014/ajot.45.4.300
- Clark, F., Zemke, R., Frank, G., Parham, D., Neville-Jan, A., Hedricks, C., ... Abreu, B. (1993). Dangers inherent in the partition of occupational therapy and occupational science. *American Journal of Occupational Therapy*, 47(2), 184-186. doi:10.5014/ajot.47.2.184
- Mosey, A. C. (1992). Partition of occupational science and occupational therapy. *American Journal of Occupational Therapy*, 46(9), 851-853. doi:10.5014/ajot.46.9.851
- Hocking, C. (2009). The challenge of occupation: Describing the things people do. *Journal of Occupational Science*, 16 (3), 140-150.

Hocking, C. (2016). Launch of “Teaching Occupation.” *Journal of Occupational Science*, 23, 4, 484 – 487.

## **TRANSLATING ‘TRANSACTION’: A LANGUAGE OF OCCUPATION**

Kendra Heatwole Shank, *Towson University*

Beth Merryman, *Towson University*

### **Abstract**

**Intent:** To advance a novel pedagogical approach for teaching advanced Occupational Science (OS) theory to graduate students. We propose a way to ‘translate’ the transactional perspective as a developing language of occupation.

**Argument:** Early articulators of the Transactional Perspective of Occupation (TPO) (Cutchin & Dickie 2012; Dickie et al., 2006) laid out tenets of the perspective such as avoiding dualisms and problematizing the individualism of occupation. These can be challenging theses for novice scholars. Likewise, although it has been part of OS discourse for over a decade, no simplified visual representation of this perspective has been developed. While lack of a visual has not been problematic within the science, it does pose a pedagogical challenge—particularly when the transactional perspective is introduced alongside other occupation-based frameworks. We argue that the TPO can be taught via presenting it as a language. Specifically, we have identified five key concepts – the vocabulary – upon which more complex understanding and discourse – the syntax of transaction – can be built. We selected Problematic Situation, (Functional) Coordination, Continuity, Creativity, and Growth to introduce the perspective within a graduate curriculum. These constructs are explored, defined, drawn and debated as a starting place, then integrated to consider occupation holistically.

**Importance to Occupational Science:** Use of the transactional perspective has steadily grown in OS research, yet application to health-promotion (e.g., Fritz & Cutchin, 2017) is just beginning. There is also great potential for refining terms that have long been part of our disciplinary language (e.g., independence; Kirby, 2015). Our work offers one approach to developing fluency in these terms and ideas during OS and OT graduate curricula in order to shape foundational understandings of occupation. Fluency in the transactional perspective will facilitate translation of these core concepts into community and population-health as students graduate and work in diverse areas. This extends the impact of the basic research and theory of OS. Furthermore, it is noteworthy that these five terms lend themselves to transdisciplinary dialog since they are not overtly health-based nor therapeutic in nature.

**Conclusions:** The Transactional Perspective of Occupation has shown robust theoretical applicability. However, as this perspective is increasingly taken up in inquiry and theoretical explication, translation into health-promotion efforts remains nascent. Embedding this perspective as a meaningful part of graduate curricula is one way to initiate impact. We argue

that language-learning principles are one effective approach to disseminating the transactional perspective beyond the academe and into practical application.

Key words: Transactional Perspective, Pedagogy, Translation

### **Questions for Discussion**

1. How can OS theories be introduced and linked to a paradigm of occupation instead of linked to frameworks/models of therapy?
2. Which terms have the most utility for differentiating TPO from other theories or assumptions about occupation? (e.g., growth vs. goals; transaction vs. interaction, functional coordination vs. adaptation)
3. In the absence of a visual model, what tools or activities help communicate the central tenets of TPO to diverse audiences?

### **References**

Cutchin, M. P., & Dickie, V. A., Eds. (2012). *Transactional perspectives on occupation*. Springer.

Dickie, V., Cutchin, M., & Humphry, R. (2006). Occupation as transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 83-93. doi:10.1080/14427591.2006.9686573

Fritz, H. & Cutchin, M. (2017). The transactional perspective on occupation: A way to transcend the individual in health promotion interventions and research. *Journal of Occupational Science*, 24, 446-457.

Kirby, A. (2015). Beyond independence: Introducing Deweyan philosophy to the dialogue on occupation and independence, *Journal of Occupational Science*, 22(1), 17-25. doi:10.1080/14427591.2013.803297

## **CLOSING SESSION**

### **MOVING INSIGHTS FORWARD: SYNTHESIS AND DISCUSSION**

Ruth Zemke, *University of Southern California*

Doris Pierce, *Eastern Kentucky University*

Jeanne Melvin

## Presenter Index

- Adrian, Lauren - 20  
Aldrich, Rebecca - 26, 54  
Alvarez, Liliana - 56  
Angell, Amber - 26, 49  
Atler, Karen - 103  
Ausderau, Karla - 39
- Bagatell, Nancy - 35, 47, 102, 107  
Bailliard, Antoine - 41, 102  
Banuelos, Kimberley - 78  
Baranek, Grace - 74  
Barnard, Alexandria - 36  
Barrett, Kate - 100  
Bathje, Molly - 38  
Ben Mair, Eyal - 15  
Bentele, Christof - 92  
Bindo, John - 81  
Birmingham, Wendy - 7  
Blanche, Erna - 65  
Botzer, Miriam - 15  
Brown, Ted - 5, 52  
Bryze, Kimberly - 36  
Bulluck, John - 74
- Cantrell, Jacqueline-Elizabeth - 78  
Carroll, Amanda - 47  
Carroll, Theresa - 49  
Cermak, Sharon - 68, 77, 97  
Chan, Adam - 78  
Chang, Megan - 2, 65  
Chu, Connie - 26, 77  
Classen, Sherrilene - 56  
Cohn, Ellen - 45  
Como, Dominique - 26, 68, 97  
Coppola, Susan - 51  
Crabtree, Lisa - 7
- Daine, Jennifer - 78  
Dallman, Aaron - 29  
D'Amico, Mariana - 13  
Dawson, Spencer - 83  
DePrimo, Adam - 51  
Draper, Abby - 58  
Duffy, Lauren - 49
- Eakman, Aaron - 8, 22, 43  
Eder, Donna - 31  
Edwards, Karen - 41
- Farnworth, Louise - 32, 34  
Feldhacker, Diana - 4, 24  
Fields, Beth - 1  
Fleischer, Anne - 72  
Floríndez, Daniella - 26, 68, 97  
Floríndez, Lucía - 26, 68, 97  
Ford, Allie - 34  
Fossey, Ellie - 32  
Fulwider, Brandi - 69
- Gailey, Patricia - 31  
Gendron, Valerie - 71  
Goorman, Angela - 83  
Gordon, Don - 28, 62
- Haertl, Kristine - 38  
Haines, Terry - 5, 52  
Heaney, Sarah - 72  
Heatwole Shank, Kendra - 114  
Henry, Kimberly - 8  
Hernandez, Raymond - 110  
Hernandez, Sarah - 17  
Hewitt, Alana - 32  
Hladik, Elisabeth - 39  
Hogan, Caroline - 36  
Holland, Cristin - 91  
Hung, Man - 7
- Ikiugu, Moses - 4, 24  
Ingolia, Margaret - 100
- Jaffe, Rachel - 1  
Jalaba, Tracy - 61  
Johnson, Khalilah - 26  
Johnson, Rebecca - 98
- Kacerovskis, Alexa - 36  
Karen, Kyle - 18  
Kinney, Adam - 22, 43  
Kirby, Anne - 74

Knott, Melissa - 56  
 Koketsu, Jean - 59  
 Koralewski, Ashley - 109  
 Kozocov, Celia - 15  
 Krasniuk, Sarah - 56  
  
 Laliberte Rudman, Debbie - 54  
 Lalor, Aislinn - 5, 32, 34, 52  
 Larson, Elizabeth - 85, 98  
 Lavalley, Ryan - 26, 107  
 Law, Evelyn - 96  
 Lawlor, Mary - 42  
 Lee, Ben - 87  
 Leive, Lorena - 75  
 Little, Lauren - 20  
 Loh, Stephanie - 2  
 Lucas-Molitor, Whitney - 4, 24  
 Lynch, Helen - 64, 89  
  
 Maren, Voss - 7  
 Martini, Rose - 67, 71  
 Mason, Ashley - 95  
 McCarthy, Karen - 78  
 McDonald, Sarah - 2  
 McNulty, Michael - 21  
 Merryman, Beth - 7, 114  
 Moran, Barbara - 2  
 Morrison, Rodolfo - 75  
 Murphy, Lisa - 32, 34  
  
 Newcomer, Adam - 109  
 Nguy, Diana - 2  
 Nolan, Christopher - 58  
  
 Orsmond, Gael - 45  
  
 Peters, Caitlin - 92  
 Pierce, Doris - 80, 83, 115  
  
 Ranger, Marie-Christine - 67  
 Reed, Kathlyn - 12  
 Riffkin, Sophia - 98  
 Riley, Leslie - 41  
 Rodakowski, Juleen - 1  
 Rolle, Natalie - 8  
 Romaniak, Holly - 39  
  
 Romeo, Palmyra - 41  
 Royeen, Charlotte - 20, 58  
  
 Sadou, Megan - 2  
 Schecter, Dalia - 15  
 Schmelzer, Laura - 109  
 Schneck, Colleen - 83  
 Schuster, Elizabeth - 13  
 Sethi, Chetna - 94  
 Sheth, Manisha - 10  
 Sideris, John - 74  
 Solet, Jo M - ii  
 Soros, Jenn - 106  
 Spira, Geela - 15  
 St. John, Brittany - 39  
 Stein Duker, Leah - 77, 97  
 Subasic, Kathy - 7  
 Szendrey, Susan - 112  
  
 Thompson, Barbara - 91  
 Tippett, Marisa - 56  
 Turnbull, David - 42  
  
 Valasek, Samantha - 61  
  
 Wadsworth, Lori - 7  
 Wakeford, Linn - 107  
 Watson, Linda - 74  
 Weber, Alyssa - 54  
 Williams, Kathryn - 41, 74, 86  
 Womack, Jenny - 51  
 Wong, Jasin - 45  
 Wood, Wendy - i, 92  
 Wrightsman, William - 104  
  
 Zuczek, Weronika - 49



## SSO:USA 2018 Conference Program Schedule

**Thursday 10/11/2018**

<b>Registration</b>	<b>Thursday: 11:30am-12:45pm; 5:00pm-7:00pm – Saxony</b> <b>Friday: 6:30am-7:00pm – Saxony</b>	
<b>Session Time</b>	<b>Session Title and Speakers</b>	<b>Location</b>
1:00pm-5:00pm	<i>Catalyzing Occupation in Practice: A Preconference Summit on Sleep OT</i>  Panel: Aaron Eakman, Ph.D., OTR/L; Don Fogelberg, Ph.D., OTR/L; Andrew Green, BA DipCOT, MSc, MPhil; Jeanne Melvin, MS, OTR/L, FAOTA; Jo Solet, MS, Ed.M., Ph.D., OTR/L; Byron Westerfield, M.D.  Facilitator: Doris Pierce, Ph.D., OTR/L, FAOTA	Spendthrift (7 <sup>th</sup> Floor)
7:00pm-8:30pm	Welcome Reception & Posters	The Mansion
8:30pm-9:30pm	Story Teller: Thomas Freese <a href="mailto:www.info@ThomasLFreese.com">www.info@ThomasLFreese.com</a>	The Mansion Patio

### Posters

Assessing Needs of Family Caregivers Along the Dementia Care Trajectory: A Scoping Review

Beth Fields, Rachel Jaffe, Juleen Rodakowski

Association Between Sleep Quality and Sensory Processing Patterns in Community-Dwelling Older Adults

Megan Chang, Megan Sadou, Sarah McDonald, Barbara Moran, Diana Nguy, Stephanie Loh

Guidelines for Assisting Individuals Identify Personally Meaningful and Psychologically Rewarding Occupations for Incorporation into Individual Lifestyles

Moses N. Ikiugu, Whitney Lucas-Molitor, Diana Feldhacker

Is There a Potential Role for Occupational Therapists to Consider the Sleep Quality of Older Adults?

Aislinn Lalor, Ted Brown, Terry Haines

Late-Career Unemployment has Mixed Effects in Retirement

Maren Wright Voss, Beth Merryman, Lisa Crabtree, Kathy Subasic, Wendy Birmingham, Lori Wadsworth, Man Hung

Occupational Therapy's Role Using Cognitive Behavioral Therapy for Insomnia (CBT-I) to Treat College Veterans

Natalie Rolle, Aaron Eakman, Kimberly Henry

Occupational Therapy Interventions to Improve Clients' Quality, Quantity of Sleep and Occupational Performance after Fast Track Joint Replacement Surgery

Manisha Sheth

Rest as an Occupation: A Historical Review of Rest in the Occupational Therapy Literature

Kathlyn Reed

The Art of Transitioning: Occupational Needs and Perspectives of Two Transwomen

Mariana D'Amico, Elizabeth Schuster

The Occupations of Sleep in Children with Sensory Modulation Disorders

Geela Spira, Eyal Ben Mair, Dalia Shecter-Amir, Miriam Botzer, Celia Kozocov

**Friday 10/12/2018**

Time	Calumet/Darby Dan	Dixiana/Lane's End	Spendthrift (7 <sup>th</sup> floor)	Salon E
	6:00am-7:00am <i>Sunrise Yoga (pre-registration required)</i> -- outside overlook (if rain, Salon AB)			
	7:00am-8:00am Breakfast --Terrace Ballroom			
	8:00am-9:45am Ruth Zemke Lecture in Occupational Science: Wendy Wood, Ph.D., OTR/L, FAOTA -- Salon E <i>Envisioning the Environment, Time, and Occupation</i>			
	9:45am-10:05am Morning Break			
10:05am-10:35am	Reframing Sleep: An Occupational Science Perspective  Sarah Hernandez	Clay Hills Still Speaking: The Untold Story of Mid-Century California Artist Glen Lukens  Michael McNulty	<i>Panel – 90 Minutes</i>  An Occupational Perspective on Racial and Ethnic Disparities in Service Access and Use: Examples from Healthcare, Education, Rehabilitation, and Social Services  Amber Angell, Lucia Floríndez, Dominique Como, Daniella Floríndez, Connie Chu, Khalilah Johnson, Ryan Lavalley, Rebecca Aldrich	The History of Restoration in The Science of Occupation  Don Gordon
10:40am-11:10am	Occupational Aesthetics and the Aesthetics of Rest and Sleep  Kyle Karen	The Experience of Meaningful Occupation is a Dimension of Community Reintegration Which Contributes to Wellbeing among Student Service Members and Veterans  Adam Kinney, Aaron Eakman		Exploring the Role of Affect within Restorative Occupation: The Contributions of Dewey and Massumi  Aaron Dallman
11:15am-11:45am	A Vital Occupation: Objects of Sleep  Charlotte Royeen, Lauren Little, Lauren Adrian	Development, Validity, and Reliability of the Meaningful and Psychologically Rewarding Occupation Rating Scale (MPRORS)  Moses Ikiugu		Reflective Dream Work as a Pathway to Restoration  Patricia Gailey, Donna Eder
	11:45am-12:00pm Seating and Lunch Service -- Salon F 12:00pm-12:45pm Theme Speaker: Jo Solet, Ed.M., Ph.D., OTR/L <i>Sleep Rocks!</i>			

<b>Time</b>	<b>Calumet/Darby Dan</b>	<b>Dixiana/Lane's End</b>	<b>Spendthrift (7<sup>th</sup> floor)</b>	<b>Salon E</b>
1:00pm-1:30pm	Recasting Curriculum to Address Critical Social and Health Problems Confronting Society Lou Farnworth, Alana Hewitt, Aislinn Lalor, Ellie Fossey	Faith Experiences of Adults with Intellectual Disability  Kimberly Bryze, Caroline Hogan, Alexandria Barnard, Alexa Kacerovskis	Ready to Run, Ready to Rest: Addressing Occupational Injustice through Sensory Inclusion Kathryn Williams, Leslie Riley, Palmyra Romeo, Karen Edwards, Antoine Bailliard	Preparing Youth with Autism Spectrum Disorder to Transition to Employment  Jasin Wong*, Gael Orsmond, Ellen Cohn (*SSO:USA Scholarship Recipient)
1:35pm-2:05pm	Use of an Online Framework for Teaching Theoretical Concepts in Occupational Science Curriculum: An Exemplar from an Australian University.  Lisa Murphy, Lou Farnworth, Alana Hewitt, Aislinn Lalor, Allie Ford	The Development of a Conceptual Model of Community Participation that Integrates Experiences of Young Adults with Intellectual and Developmental Disability  Molly Bathje, Kristine Haertl	Interdependence in Family Life: Occupational Science Perspectives on Caregiving and Restoration  Mary Lawlor, David Turnbull	Occupational Participation and Community Integration in Post-Secondary Students with Cerebral Palsy: Challenging Dominant Conceptualizations  Amanda Carroll, Nancy Bagatell
2:10pm-2:40pm	Threading Sleep through an Occupation-Centered Curriculum  Nancy Bagatell	Exploring Participation in Health-Promoting Occupations for People with Intellectual Disabilities Through Photovoice  Brittany St. John, Elisabeth Hladik, Holly Romaniak, Karla Ausderau	Meaningful Occupation Mediates the Relationship between Sleep Disturbances and Meaning and Purpose in Life among Student Service Members and Veterans  Aaron Eakman, Adam Kinney	Understanding the Occupations of Young Adults with Autism in Context: How Does the Group Home Environment Influence Self-Determination and Participation?  Amber Angell, Theresa Carroll, Lauren Duffy, Weronicka Zuczek
2:40pm-3:00pm Afternoon Break				

<b>Time</b>	<b>Calumet/Darby Dan</b>	<b>Dixiana/Lane's End</b>	<b>Spendthrift (7<sup>th</sup> floor)</b>	<b>Salon E</b>
3:00pm-3:30pm	<i>Forum – 60 minutes</i> Problem-Based Learning as a Pedagogical Tool to Facilitate Theory Engagement Associated with Occupational Science	Quandary of Sleep: How Sleep is Represented (Or Not) in Research on Long-Term Unemployment  Rebecca Aldrich, Debbie L. Rudman, Alyssa Weber**  The	A Description of Pre-Sleep Routines of Adults Using Graphic and Interview Methods  Jean Koketsu	The Philosophy and Science of the Restorative Powers of Outdoor Recreation  Don Gordon
3:35pm-4:05pm	Adam DePrimo, Susan Coppola, Jenny Womack**	Systematic Literature Review of Insufficient Sleep and Shift Worker Fitness to Drive: Preliminary Findings  Melissa Knott, Sherriline Classen, Sarah Krasniuk, Marisa Tippett, Liliana Alvarez	<i>Forum – 60 minutes</i> Transactions Between Sleep and Occupational Engagement: Looking at Habits in Context  Tracy Jalaba, Samantha Valasek	Restorative Outdoor Urban Contexts: Exploring Social Integration in Parks and Playgrounds  Helen Lynch
4:10pm-4:40pm	Occupational Therapy Sleep Considerations of Older Adult's Health Outcomes Post-Hospitalisation  Aislinn Lalor, Ted Brown, Terry Haines**	Causes of Occupational Injustice: Social and Structural Determinants of Health  Abby Draper, Christopher Nolan, Charlotte Royeen		Choosing Restful and Relaxing Occupations  Erna Blanche, Megan Chang
	4:40pm-7:00pm <i>Occupational Balance Break/ Silent Auction Preview</i> -- Bluegrass Pavilion			
	5:00pm-6:00pm <i>Learn to Make Bourbon Balls (pre-registration required)</i> -- Terrace Ballroom			
	5:00pm-6:00pm <i>Meet the Board (Hotel Bar)</i>			
	5:45pm-6:45pm <i>How to Review and Submit Abstracts for SSO:USA Conferences!</i> -- Calumet/Darby Dan			
	7:00pm-8:00pm RZLOS Reception/ Student Posters/ Silent Auction -- Bluegrass Pavilion (entertainment provided by <i>Hook and Line Old Time String Band</i> )			
	8:00pm-9:30pm Celebration Dinner/Silent Auction -- Bluegrass Pavilion			
	9:30pm-12:00pm <i>Sing-along</i> – Bluegrass Pavilion			

### Student Posters

A Tangled Web: Studying Occupational Balance in Dual Earner Families with School-Aged Children

Marie-Christine Ranger, Rose Martini

Beliefs and Misconceptions about the Diagnosis of Autism: Understanding the Perspectives of Latino Parents and Caregivers

Lucia I. Floríndez, Daniella, C. Floríndez, Dominique H. Como, Sharon A. Cermak

Does Sleep Hygiene Improve Sleep Performance After Brain Injury?

Brandi Fulwider

Exploring Youth's Implementation of Sleep Hygiene Strategies.

Valerie Gendron, Rose Martini

Leaving Journalism: Self-identity during Career Transition for Female Former Kentucky Reporters

Sarah Heaney, Anne Fleischer

Longitudinal Associations between Children's Sensory Experiences and Family Occupations

Grace Baranek, Kathryn Williams, Anne Kirby, Linda Watson, John Sideris, John Bulluck

Sleep Occupation as an Opportunity to Rethink the Complexity of Human Occupation

Lorena Leive, Rodolfo Morrison

The Impact of Multisensory Environments on Client Outcomes: A Scoping Review

Connie Chu, Sharon Cermak, Leah Stein Duker

Transition in Occupations of Refugees During Resettlement

Jacqueline-Elizabeth Cantrell, Kimberley Keegan Banuelos, Adam Chan, Jennifer Daine, Karen McCarthy

### Saturday 10/13/2018

Time	Calumet/Darby Dan	Dixiana/Lane's End	Spendthrift (7 <sup>th</sup> floor)
7:30am-9:00am Breakfast/ SSO:USA Business Meeting -- Salon F			
9:00am-9:30am	75 Sleep Starter Clients: Collaborative Design of First-time Occupational Science-based Interventions  Doris Pierce	Employing Occupational Science to Support Lifestyle Change Interventions: Tacit Knowledge and Threshold Concepts?  Elizabeth Larson	Reconstituting the Concept of Play for Play Sake: Play as Occupation  Helen Lynch
9:35am-10:05am	Sleep Hygiene's Effect on Reported Hours of Uninterrupted Sleep in OT Students.  John Bindo	Making Sense of Occupation: A Call for a Multidisciplinary Approach  Kathryn Williams	A Mixed-Method Exploration of Engagement during the Occupation of Play  Cristin Holland, Barbara Thompson

<b>Time</b>	<b>Calumet/Darby Dan</b>	<b>Dixiana/Lane's End</b>	<b>Spendthrift (7<sup>th</sup> floor)</b>
10:10am-10:40am	An Occupational Science Perspective: The Association of Sleep and Hand Function in Carpal Tunnel Syndrome  Angela Goorman, Doris Pierce, Spencer Dawson, Colleen Schneck	Scoping Review of Asian Perspectives on Occupation in English-medium Occupational Science and Occupational Therapy Journals: A Critical Turn for Critical Approaches  Ben Lee	Occupational Therapy in an Equine Environment for Children with Autism: A Transactional Case Study  Christof Bentele, Caitlin Peters, Wendy Wood
10:40am-11:00am Morning Break			
11:00am-11:30am	Conditions Influencing Everyday Parenting Occupations: Past, Present, and Future Considerations  Chetna Sethi	5Minutes4Myself: A Feasibility Study and Preliminary Outcomes of an App-Supporting Occupation-Based Wellness Program for Caregivers of Children with Autism  Elizabeth Larson, Rebecca Johnson, Sofia Riffkin	Understandings of Restorative Experiences Associated with Daily Activities among College Students  Karen Atler
11:35am-12:05pm	Children's Perspectives on Mealtime Occupations: Connecting with Others  Ashley Mason	Parents of Children with Complex Trauma: Occupations Viewed Through Photovoice  Margaret Ingolia, Kate Barrett	Home as a Restorative Place: Illuminating How Stigmatization Influences the Occupational Experience and Well-Being of Gay Married Men  Bill Wrightsman
12:10pm-12:40pm	Exploring Oral Care Occupations of Latino Children With And Without Autism  Dominique Como, Evelyn Law, Daniella Floríndez, Leah Stein Duker, Sharon Cermak, Lucia Floríndez	An Occupational Science Approach to Teaching Community-Level Occupational Therapy Practice  Antoine Bailliard, Nancy Bagatell	How Meaning Defines Restorative Occupations and Leads to Occupational Balance  Jenn Soros
12:40pm-12:45pm Box Lunches -- Salon F 12:40pm-3:40pm <i>Occupational Balance Break</i> 12:45pm-3:40pm <i>Keeneland Race Course</i>			

<b>Time</b>	<b>Calumet/Darby Dan</b>	<b>Dixiana/Lane's End</b>	<b>Spendthrift (7<sup>th</sup> floor)</b>
3:40pm-4:15pm	<i>Forum – 60 minutes</i>  Embedding OS Research in an Entry-Level OT Program: Insight and Opportunity  Linn Wakeford, Nancy Bagatell, Ryan Lavalley	Uncovering Connections Between Engagement in Meaningful Activities and Psychological Well-being in Individuals Living in Poverty  Laura Schmelzer, Adam Newcomer, Ashley Koralewski	The Relationship of Occupational Science and Occupational Therapy: A Scoping Review  Susan Szendrey
4:15pm-4:40pm		Allostatic Load as Physiological Indicator of Occupational Imbalance  Raymond Hernandez	Translating ‘Transaction’: A Language of Occupation  Kendra Heatwole Shank and Beth Merryman
4:45pm-5:45pm <i>Moving Insights Forward: Synthesis and Discussion</i> -- Spendthrift  “ <i>How is occupational science evolving?</i> ” Ruth Zemke, Ph.D., OT, FAOTA “ <i>What are the future directions of occupational science research on sleep and restorative occupations?</i> ” Doris Pierce, Ph.D., OTR/L, FAOTA “ <i>How can we best apply our understanding of sleep and restorative occupations in practice?</i> ” Jeanne Melvin, MS, OTR/L, FAOTA			
7:00pm <i>Kentucky House Party</i> Doris Pierce’s House 299 Adams Lane Richmond, KY (859) 893-4332			

\*SSO:USA Student Scholarship Recipient