Weekday and Weekend Classes of 2017

Graduate Research Presentations

Saturday, April 22, 2017
5:15 – 8:05 pm

Sandy and Marlene Insalaco Hall
Rooms 216-217
“Research is the process of going up alleys to see if they are blind.”
— Marston Bates

“The outcome of any serious research can only be to grow two questions
where only one question grew before.”
— Thorstein Veblen

“Don't be a novelist---be a statistician. Much more scope for imagination!”
— Darrell Huff
**PROGRAM**

5:15 – 5:30 pm  Weekend and Weekday Program Class Photographs

5:30 – 5:35 pm  Words from the Dean  
Dr. Leamor Kahanov College of Health Sciences & Education

5:35 – 5:50 pm  Welcome  
Dr. Lori Charney, Chair, Occupational Therapy Department  
Presentation of Pins  
Occupational Therapy Faculty

5:50 – 5:55 pm  Research Presentation Opening Remarks  
Dr. Lalit J. Shah, Professor and Research Coordinator,  
Occupational Therapy Department

6:00 – 8:00 pm  Open hors-d’oeuvres table  
Everyone eats and views posters at the same time

6:00 – 7:00 pm  Research Posters (8)

7:00 – 8:00 pm  Research Posters (7)

8:00 – 8:05 pm  Final wrap up
Poster # 1

Title: Relevance of Level I Fieldwork Schedule Design in Preparation for Level II Fieldwork
Researchers: Kay Albitz, OTS; Mary Boyle, OTS; Victoria Freda, OTS; Kerrie Hall, OTS
Research Committee Chair: Kathleen Hughes Butcher, MS, OTR/L
Reader: Dr. Joseph Cipriani Ed. D., OTR/L

Abstract:
Level I fieldwork schedule designs were compared to determine the most beneficial schedule design in preparing occupational therapy students for level II fieldwork. The two designs compared were a full days for one-half a term schedule design and a full days for one week schedule design. A survey booklet was distributed to attain the perspectives and experiences of occupational therapy clinical instructors and occupational therapy students while completing level II fieldwork in the United States. This research study utilized a mixed paradigm including both qualitative and quantitative research, as data was obtained through open ended questions and visual analog scale questions. Due to the limited response rate from both the clinical instructors and students, no definitive conclusion may be drawn. However, there is preliminary evidence that suggests there may be an advantage to a level I fieldwork schedule design of full days for one-half a term for occupational therapy students.

Poster # 2

Title: One Handed Typing: Layouts Do Matter
Researchers: Danielle Blass, OTS; Tina Colatriano, OTS; Taylor Grenier, OTS; Devin Simpson, OTS
Research Committee Chair: Denis Anson, MS, OTR
Reader: Dr. Joseph Cipriani, Ed. D., OTR/L

Abstract:
The QWERTY keyboard layout has remained dominant due to familiarity, rather than efficiency. The Dvorak keyboard layout was created by rearranging letters to allow for faster and more efficient typing. While the Dvorak layout is demonstrably superior, QWERTY is still sufficient for most typists, and the benefits to be obtained by converting to Dvorak are not obvious. However, if QWERTY is sufficient for two-handed typists, can the same be said for those who use only one hand to type? This paper aims to guide clinician's regarding keyboard use for those with functional use of only one hand, since technology is a vital part of today's society. Results of this study support the claim that the Dvorak layout provides a faster typing speed than the QWERTY layout. Implementing the use of the Dvorak keyboard layout is inexpensive and reliable, benefiting individuals who use only one hand to type.
**Poster # 3**

**Title:** Examining the Impact of a Weighted Blankets on the Stress Responses of Persons on a Dementia Unit  
**Researchers:** Allison Alexander, OTS; Alexis Campbell, OTS; Jeffrey Kramer, OTS; Jennifer Snyder, OTS  
**Research Committee Chair:** Dr. Lauren Zack OTD, OTR/L  
**Reader:** Dr. Ellen McLaughlin, Ed. D., OTR/L  

**Abstract:**  
The purpose of this study was to determine the effectiveness of weighted blankets on reducing stress responses in patients with dementia using a single subject mixed methods research design. Five patients’ blood pressure and heart rate were measured at predetermined intervals throughout the fifteen-minute intervention session during which the patients had a twelve-pound weighted blanket on their lap. Results indicate five out of five participants had a decrease in heart rate, and four out of five participants had a decrease in systolic blood pressure. These decreases in vital signs are indicative of a decrease in an individual’s stress response. Additionally, with the use of the Modified Pittsburgh Agitation Scale, the qualitative data, indicated a decrease or stagnation in level of agitation in all patients. Thus, this evidence shows that the use of weighted blankets is an effective intervention for decreasing stress responses in individuals with dementia.

**Poster # 4**

**Title:** Dr. Brown's Options Bottle® System's Effect on Flow Rates of Nectar-Thickened Liquids  
**Researchers:** Jacqueline Cormier, OTS; Katie Kelly, OTS; Ashley Salerno, OTS; Kaitlyn Smalley, OTS; Deirdre Stevens, OTS  
**Research Committee Chair:** Dr. Kimberly Kubistek, OTD, OTR/L  
**Reader:** Dr. Elaina DaLomba, PhD, OTR/L  

**Abstract:**  
The purpose of this project was to evaluate the flow rates of nectar thickened liquids through the Dr. Brown's Options® bottle with and without the ventilation system, using the Y-Cut and Levels 2,3 and 4 nipples. Similac® formula was mixed with Gerber® rice cereal to create a nectar thickened liquid, and flow rate was measured by utilizing the Medela® breast pump to extract the formula. Each nipple was tested five times with and without the Dr. Brown's Options® ventilation system, for 60 seconds with the breast pump at maximum power and expression mode. A significant difference (p<.05) in flow rates was found between each Dr. Brown's nipple with and without use of the Dr. Brown's Options® ventilation system. The difference in flow rates between nipples is an important factor for the therapist in choosing the most appropriate bottle and nipple to ensure the safest feeding experience.
**Poster # 5**

**Title:** Voices Heard: Student Perceptions and Recommendations for Their Occupational Therapy Education  
**Researchers:** Jackie Brocious, OTS; Gerardina Menza-Bogdanovic, OTS; Lyndsey McGrevy, OTS; Amy Kingsley, OTS  
**Research Committee Chair:** Dr. Grace Fisher, Ed. D., OTR/L  
**Reader:** Dr. Gwen Bartolacci OTD, OTR/L  

**Abstract:**  
**Objective:** This study examined students’ perspectives and experiences while completing an occupational therapy program. Students’ reasons for choosing a career in occupational therapy, preferred educational approaches, and program recommendations were addressed.  
**Method:** A mixed-methods design was used to conduct a nationwide survey. Program directors of 154 accredited occupational therapy programs were requested to forward the survey invitation to students. Of the students who voluntarily participated in the online survey, 20 students stated interest in a telephone interview. Eight students in total were interviewed.  
**Results:** Data from 197 students, ranging in ages from 17-35 years old were retrieved. A majority of students stated they chose to study occupational therapy due to prior exposure, personal qualities, and vocational characteristics. Students overwhelmingly agreed that hands-on experiences, simulation, and demonstration were most beneficial to learning. Clinical reasoning in fieldwork was stated to be enhanced by hands-on activities and case-based learning. Recommendations for academic and fieldwork curricula were diverse.

**Poster # 6**

**Title:** Pennsylvania Occupational Therapy Fieldwork Educator Practices and Preferences in Clinical Education  
**Researchers:** Kaitlyn Ryan, OTS; Melanie Beck, OTS; Lee Ungaretta, OTS; Magdalena Rooney, OTS  
**Research Committee Chair:** Dr. Leamor Kahanov Ed. D., ATC, LAT  
**Reader:** Dr. Elaina DaLomba Ph. D., OTR/L  

**Abstract:**  
The shortage of clinical education fieldwork sites coupled with a concern over the quality of the experience poses an unintended outcome of the recent changes in the healthcare system and an increasing number of occupational therapy students. This study employed a mixed method research design to examine the practices and preferences of fieldwork educators in Pennsylvania ACOTE accredited programs. From the 49 quantitative survey participants, 10 practices and preferences considered important when supervising fieldwork students emerged. Another five themes related to a quality fieldwork experience were garnered from the six qualitative interviews. Results suggest that fieldwork educators understand the value of clinical education and intend to continue to supervise students. While fieldwork educators value their role as an educator, they often lack the time and resources necessary to feel effective. Future research into resource utilization and ways in which academic programs and professional associations can support fieldwork educators is necessary.
**Poster # 7**

**Title:** The Role of Multiple Variables in Job Satisfaction of Occupational Therapists  
**Researchers:** Laura Bradley, OTS; Hope Cohen, OTS; John Bruce, OTS; Eric Win, OTS  
**Research Committee Chair:** Dr. Grace Fisher, Ed, D., OTR/L  
**Reader:** Dr. Gwen Bartolacci, OTD., OTR/L

**Abstract:**  
Objective: This study examines the role of multiple personal and work factors the job satisfaction of occupational therapist.  
Method: A mixed-method research design was used, by analyzing both quantitative and qualitative data through survey and interview methodology, to examine the impact of each factor. The survey questions investigated respondents’ work experience, workload, experience working with other agencies, personal life, interaction with other co-workers, receiving appropriate training, and overall job satisfaction. The interview questions focused on work and life balance, benefits, patient care responsibilities, management, and level of preparedness from their academic institution.  
Results: Data were analyzed by the researchers through the isolation and comparison of overall job satisfaction to variables that the researchers believed had the potential for impacting satisfaction within the workplace. Stress appeared to contribute to the respondents’ overall job satisfaction. In addition, most respondents regardless of overall job satisfaction strongly agreed or agreed with being appropriately trained by their academic institution. There was also a strong positive correlation between overall job satisfaction and remaining within the field of occupational therapy.  
Conclusion: These findings may assist academic educators, health care facility managers, and occupational therapists and their allied health colleagues in the development of effective strategies to increase job satisfaction and create an optimal work environment.

**Poster # 8**

**Title:** New Practitioners’ Opinions on Pursuing a Post-Graduate Education  
**Researchers:** Chelsea Hall, OTS; Rebecca Hanke, OTS; Morgan Reed, OTS; Nicole Schwartz, OTS  
**Research Committee Chair:** Dr. Andrea Collins, OTD, OTR/L  
**Reader:** Dr. Orley Templeton, OTD, OTR/L

**Abstract:**  
The purpose of this project was to determine the interest level of new practitioners in pursuing higher education after receiving their Master’s degree in Occupational Therapy (OT). This includes clinical doctorates, PhDs, or specializations. The results will increase the field’s understanding of practitioners needs and provide information to academic institutions and clinicians. Participants included OTs practicing for less than five years. A literature review highlighted a lack of research concerning new OTs pursuing postgraduate education. A survey was mailed to 500 randomly selected therapists via the AOTA List Rental Service and was also available online. The response rate was 19.6% from mailed surveys along with ninety-seven responses from online surveys. The results indicted a negative connotation from practitioners regarding pursuing a higher education, a need for new practitioners to become more aware of potential degrees, and a need for institutions to consider online delivery options for postgraduate education.
Research Posters- Session II: 7:00-8:00

Poster # 1

Title: Establishing the Face Validity of the Point of View Survey
Researchers: Krista Spano, OTS; Yalixsa Delgado, OTS; Pasqualina Tirro, OTS; Kaylin Miley, OTS; Tierney Hafner, OTS
Research Committee Chair: Denis Anson, MS, OTR/L
Reader: Dr. Lalit J. Shah Ed. D., OTR/L

Abstract:
The Point of View Survey (POVS) is a screening tool for handwriting which claims to identify children at risk of developing handwriting difficulties. This tool intends to identify handwriting difficulties in children so that they can receive appropriate interventions. **Purpose:** The purpose of this study is to test the face validity of the POVS. **Methods:** This quantitative study surveyed 115 practicing occupational therapists. The participants evaluated the scoring sheet and administration manual of the POVS and completed a 13-item survey. Information was obtained via a confidential, online tool. **Results:** Mixed results about the validity of the POVS indicate that the face validity is not strong. Practitioners agreed that the concept of the screening tool is important, but were not convinced that POVS meets this requirement. **Conclusion:** The face validity of the POVS is questionable and further research is required. A continued search for more evidence-supported handwriting screening tool is worthwhile.

Poster # 2

Title: Contemporary Issues and Trends Facing Occupational Therapy Faculty
Researchers: Wilfredo Dones, OTS; Naromie Petit-Frere, OTS; Katlyn Dillow, OTS; Trevor Behler, OTS
Research Committee Chair: Dr. Grace Fisher Ed. D., OTR/L
Reader: Dr. Gwen Bartolacci OTD, OTR/L

Abstract:
**OBJECTIVE.** The purpose of this study is to examine current academic issues and trends in occupational therapy (OT) education from the direct perspective of OT faculty via survey and interview. **METHOD.** The authors conducted a mixed-method design study. The authors implemented a custom-designed survey to collect data on modern OT education from OT faculty members. The authors conducted follow-up telephone interviews in order to supplement their survey findings. **RESULTS.** 1,261 OT faculty members were invited to participate in the nationwide survey. 318 responded, 317 met inclusion criteria. Findings indicate that participants were concerned with discrepancies between time allotment and quantity of job responsibilities, paucity of qualified educators available, and faculty recruitment challenges. Views on student professionalism were mixed. Most participants noted that faculty-mentoring facilitated their transition from clinical practice to academia. **CONCLUSION.** This study highlighted many avenues that might enhance OT education quality and affect the current OT educational workforce.
**Poster # 3**

**Title:** Effectiveness of Sensory and Social Group Interventions to Improve the Participation of Children with ASD via Goal Attainment Scaling

**Researchers:** Felicia Bartello, OTS; Jonathan Jorda, OTS; Erin Soulsby, OTS; Desirae Waltman, OTS

**Research Committee Chair:** Dr. Lori Charney OTD, OTR/L

**Reader:** Dr. Ellen McLaughlin Ed. D., OTR/L

**Abstract:**
Social deficits related to ASD can hinder the development of high self-esteem and personal relationships. OTs commonly use interventions such as sensory integration and social skills training as individual interventions for these children. Although evidence has shown these separate interventions have a positive impact on social behaviors, very little evidence has looked into combining the two approaches into one intervention. This single subject study looked into the effectiveness of combining social skills training and SI simultaneously during intervention. The study utilized goal attainment scaling (GAS) as an important measure for the individualized behaviors of the children and their improvements from beginning to end. Throughout the intervention phase, a social skills rating form (SSRF) was also completed each day based on observations of the researchers at the end of each session. Results of both the GAS and SSRF conclude that the interventions used produced significant improvements in children with ASD.

**Poster # 4**

**Title:** Use of Legos to Enhance Social Skills in Elementary School Students with Autism

**Researchers:** Stephanie Dougherty, OTS; Lauren Henry, OTS; Nicole Kelley, OTS; Danielle Kissane, OTS

**Research Committee Chair:** Dr. Andrea Collins OTD, OTR/L

**Reader:** Dr. Orley Templeton, OTD, OTR/L

**Abstract:**
Research supporting the ability of children with ASD to generalize their social skills has been implemented in the context of special education services; however, the use of building blocks, such as Legos, as an intervention to improve the social interactions of children with Autism Spectrum Disorder has not been significantly researched within the school system (Legoff & Sherman, 2006). Through the use of Legos as an intervention tool, this specific research study was designed to investigate the effectiveness of Legos on increasing the social skill development of elementary-aged children diagnosed with ASD. Four students participated in this study. The overall results yielded promise for the potential of Lego based therapy to increase social skills in children with ASD. Participants were all noted to make specific improvements in their social interaction skills.
Title: An Agricultural and Horticultural Transition Vocational Program for Adolescents with Special Needs
Researchers: Alyssa Auer, OTS; Fallon Cooper, OTS; Meghan Digerolamo, OTS; Quinn Fohlinger, OTS; Allison Hausman, OTS; Erin Huff, OTS
Research Committee Chair: Dr. Jennifer Dessoye OTD, OTR/L
Reader: Dr. Joseph Cipriani Ed. D., OTR/L

Abstract:
The use of horticulture, agricultural, and animal-assisted therapy is used internationally with a variety of individuals in vocational transitional programs. The Dream Green Farm Program (DGFP) at The Lands at Hillside Farms was researched in this mixed-method study. Quantitative data was derived from the analysis of scores over three data point collections using the ACL, Beery-VMI, and the Texas Functional Living Scale. Qualitative data was collected through individual interviews recorded during each data collection. Although the quantitative data yielded no significant results, the clinical significance of the qualitative interviews derived themes of significance in determining the efficacy of the program. Analysis of the interviews discovered themes that confirmed the program's ability to build relevant, transferrable skills, pre-vocational skills, self-efficacy and encouraging self-determination. The established themes can help OT’s determine appropriate vocational transition programs to meet each adolescent’s individual needs and lead to the implementation of similar programs to the DGFP.

Title: Examining the Impact of Calming Music on the Stress Responses of Persons with Dementia
Researchers: Trevor Bodnar, OTS, Alexandra Elmes, OTS, Nicole Petti, OTS, Kaitlyn Sledzinski, OTS
Research Committee Chair: Dr. Ellen McLaughlin, Ed.D., OTR/L
Reader: Dr. Lauren Zack, OTD, OTR/L

Abstract:
Dementia is an insidious disease often associated with anxiety, behavioral, cognitive and physiological changes as the disease process progresses. This study will examine the impact of calming music on the stress responses of persons with dementia. Stress responses were measured by physiological outcomes, including heart rate and blood pressure, to indicate the impact of music on lowering stress and anxiety in people living with dementia. In addition to physiological changes, behavioral changes were measured using the Behavioral Rating scale with each participant. Overall, there was a decrease in systolic blood pressure throughout intervention with variable results being noted in heart rate. Using the Behavior Rating Scale, there was a found decrease in aberrant vocalization, motor agitation, aggressiveness, and resisting care post intervention. However, further research is necessary to ensure validity of outcomes and effectiveness of musical intervention on physiological outcomes.
Title: Interprofessional Education in Occupational Therapy and the Health Sciences

Researchers: Dominique Lemire-Ross, OTS; Rebecca Pickel, OTS; Terri Bugelholl, OTS

Research Committee Chair: Dr. Leamor Kahanov Ed. D., ATC, LAT

Reader: Dr. Elaina Dalomba, PhD, OTR/L

Abstract:
Implementation of interprofessional education (IPE) is diffuse and varied with minimal assessment of effective instructional methods that prepare students for the workplace. Our study assessed faculty and student perceptions of IPE instructional methods in OT education. We implemented a web-based survey uploaded to SurveyMonkey® to collect responses. Likewise, researchers recruited a purposive sample of interview participants from a small religious university. Semi-structured questions were utilized to interview faculty from various healthcare professions regarding perceptions of IPE. We identified statistically significant differences between student and faculty regarding the delivery of IPE for seminar-based, classroom, and time to implement activities. Findings suggest that IPE curricular integration should focus on immersion in direct experiences facilitating cooperation. IPE is perceived as a valuable curricular construct thus increasing support to reduce resistance is imperative.

8:00 – 8:05

Closing Remarks – Dr. Shah