5th Annual Waldron College Interprofessional Symposium & Expo

April 10, 2018
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Letter from the Dean

On behalf of the Waldron College of Health and Human Services (WCHHS), I want to welcome you to the 5th Annual WCHHS Interprofessional Symposium & Expo. The objective of this event is to develop relationships among the faculty and students in all of the college’s programs in the areas of research, scholarship, and service. We are excited to showcase the exceptional research and scholarly work of our faculty and students as well as the service opportunities in which they engage every day. It is our hope that today’s event will continue to showcase and promote interprofessional scholarship and service in our college, across the university, and throughout the community.

I would like to thank the following individuals for their support:

· Radford University First Lady Dr. Marisela Rosas Hemphill, for joining us today and providing the keynote address;
· The members of the Waldron College Interprofessional Planning Committee and Peer Review Committee;
· Dr. Corey Cassidy, WCHHS Associate Dean and Director of the Center for Interprofessional Education and Practice, for her passion and energy in promoting and supporting interprofessional education, collaboration, and practice among our disciplines.

Once again, on behalf of Waldron College, I appreciate your attendance today. I hope you find today’s Symposium & Expo to be a rewarding and productive experience.

Best wishes,

Kenneth M. Cox

Kenneth M. Cox, Au.D, M.P.H., CCC-A
Professor and Dean
Waldron College of Health and Human Services
Radford University
Letter from the Associate Dean

Dear colleagues and visitors,

It is my pleasure to welcome you to the Waldron College of Health and Human Services 5th Annual Interprofessional Symposium & Expo. With the creation of the new Center for Interprofessional Education and Practice in 2017, we present this program, now in its fifth year, as an opportunity to share and learn about new and unfolding scholarship, to share innovative programs that have been implemented in our college and across campus, and to acknowledge and thank community and clinical partners who work with our students throughout the year. Our faculty members have a distinguished track record of disseminating their scholarship and service within venues that involve professional associations with colleagues across the country and within international arenas. Our partnerships with agencies across and beyond the state of Virginia ensure that our students experience quality real-world experiences, collaborate across disciplines, and in general, strengthen the identity of Waldron College as a vibrant academic community. Today’s program provides us with a venue through which to share and celebrate our college’s successful endeavors and partnerships with our colleagues here on campus and across the Commonwealth.

The beauty of today’s event is that it is truly an intra- and inter-professional presentation of projects and programs, allowing faculty and students to showcase their work for and with colleagues who may otherwise not have an opportunity to share. The themes within and among the presentations span the full programmatic spectrum of the college and across the university. The subjects also span the globe, as many of the presentations and programs highlight work through which Waldron College’s students and faculty have engaged in scholarship and service in a variety of national and international settings. Finally, today’s activities serve as a demonstration of the natural collaboration between faculty, students, and community partnerships and how effectively scholarship and service are integrated into the vital commitment to teaching at RU.

As a participant, I am sure you will learn about new scholarly opportunities and service endeavors in which you will want to participate while making rewarding new connections for future endeavors at RU. I hope you take advantage of the food, the fun, and the collegiality that will be taking place throughout the day!

Sincerely,

Corey H. Cassidy

Corey H. Cassidy, Ph.D., CCC-SLP
Professor and Associate Dean
Director, Center for Interprofessional Education and Practice
Waldron College of Health and Human Services
Radford University
Podium Presentations

[*] indicates session has earned Peer Review designation
*A Literature Review of the Effectiveness of High Fidelity Simulation in Nursing Education*

Beth Thompson  
*School of Nursing*

**Abstract:**

The use of high-fidelity simulation (HFS) in undergraduate nursing curriculum as an adjunct to traditional clinical experiences has steadily increased in the past ten years. The literature reported that both faculty and students believed there were opportunities for learning and increasing confidence in simulation that were not available in the traditional clinical setting. Simulation allows for standardized learning opportunities in a safe learning environment for students to be able to practice and make mistakes without untoward effects to patients. In addition, faculty reported that simulation improved student’s critical thinking and clinical judgment. Desired outcomes of using simulation in the curriculum were not only to improve clinical competence, but to have students pass the NCLEX-RN exam, the registered nursing licensing exam, on the first attempt. Most of the studies are quantitative with a few that were qualitative. The review of the literature investigated the relationship between the use of simulation and first time NCLEX pass rates, clinical judgment, and readiness for professional practice of new graduate nurses, including evaluating the relationship between the use of simulation and the cognitive, affective, and psychomotor domains.
*Advice from the Trenches: Migrating from Traditional to Interactive Classroom*

Sarah Gilbert  
*School of Nursing*

**Abstract:**

In an effort to improve student attention, engagement, and preparation, two traditionally taught classes were flipped one year ago. Changing the method of teaching is unsettling to students who rely on lecture and typing to absorb and understand information. Lessons that have been learned include: patience, perseverance, pre-planning, adjusting activities for larger classes, updating and changing interactive experiences, and internet resources.
An In-Depth Literature Review Social Supports in Aging

Elease Cook 

Abstract:

Medicaid is a government-funded program that covers 4.6 million low-income seniors. Through this funding there are care centers such as the Program for All-Inclusive Care of the Elderly (PACE) that accept Medicaid. Through PACE, there are social supports for caregivers such as, respite which allow the continuance of independence for older adults. Comparatively, there are Adult Day Care Centers that also provide caregiver support through respite. This independent literature review will examine how caregiver supports through PACE and adult day care facilities can delay the need for long-term care for the elderly. The focus will be on the increased burden on caregivers in managing their loved one’s chronic disease such as Alzheimer’s, Dementia, and Stroke. This review will also focus on caregiver burnout and stress, which is common when caring for an older adult with these diseases. Discussion of how expensive long-term care facilities are, how they utilize a large portion of allocated Medicaid funds, and how decreasing the time for older adults in long-term care facilities would be more cost-efficient.
Considerations in Professional Development to Support Rural School-Based Speech-Language Pathologists

Elizabeth Lanter  
Stephanie Vaughan  
Amy Weldon  
Allison Willits  
Allison Campbell-Doss

Department of Communication Sciences and Disorders

Abstract:

In the contemporary educational climate, an issue relevant to the scholarship of teaching and learning concerns the supports afforded to school-based speech-language pathologists. Children with language impairments account for a considerable proportion of school-based speech-language pathologists’ caseloads, and the increased risk of reading-related problems for these children warrants consideration (Farquharson, Tambyraja, Logan, Justice, & Schmitt, 2015). A longitudinal study by Catts and colleagues (2002) revealed children who begin formal schooling with a language impairment are twice as likely than peers with typical language to experience reading challenges. Risk of reading difficulty is particularly concerning for children with persistent language deficits. Werfel and Krimm (2017) assessed literacy among middle and upper elementary age children and found a significant majority (84%) had below average achievements. Despite having children with language impairments on their caseloads, not all speech-language pathologists are adequately addressing the literacy needs of these children (Blood, Mamett, Gordon, & Blood, 2010).

A study by Fallon and Katz (2011) that surveyed nearly 650 school-based speech-language pathologists found that training in children’s written language disorders increased the likelihood by 5-fold that they addressed the spoken and written language skills of children with language impairments on their school-based caseloads. Professional learning is largely believed to enhance the instructional effectiveness of school-based professionals (Blank, de las Alas, & Smith, 2008; Borko, 2004; Kennedy, 2016; Powell, Diamond, Burchinal, & Koehler, 2010). Accordingly, professional learning may be a promising means of supporting more school-based speech-language pathologists to address the literacy needs of children with language impairments.

This presentation will summarize recommended practices in school-based professional learning. In doing so, student presenters will discuss the relevancy of recommended design features in professional learning outlined by Desimone (2009): a focus on content, opportunities for active learning, cohesion, a participatory emphasis, and duration. Each design feature will be (a) defined, (b) examined with reference to pedagogical practices, and (c) illustrated with an application that explores how a school-based speech-language pathologist might further children’s language and literacy learning.
*Disability Sport as a Health Promotion Initiative*

**J.P. Barfield  
Health and Human Performance**

**Abstract:**

The purpose of the presentation is to describe the outcomes of disability sport as they relate to improved physical function, independence, and health promotion. The risk of chronic diseases and morbidities are substantially greater in persons with disabilities compared to the general population. This reality is compounded by reduced access to essential components of healthy living including regular physical activity and general healthcare. Disability sport offers meaningful health benefits to participants with varied impairments and, unlike able-bodied sport, provides more opportunities for individuals as they age as opposed to less. The presentation will address the benefits of sport in therapeutic and post-therapeutic settings as well as educate audience members on how to identify disability sport opportunities.
**Evaluation of a Modified Post-Cardiac Surgery Cardiac Arrest Protocol with Resternotomy with Internal Cardiac Massage**

Charles Bullins
Cathy Jennings
Eunyoung Lee

**School of Nursing**
**Carilion Clinic**
**School of Nursing**

**Abstract:**

Background: The survival rate for post cardiac surgical arrests is shown to be higher than for in-hospital cardiac arrest (50% vs. 24.8%). Success is attributed to the high incidences of three reversible causes: ventricular fibrillation, cardiac tamponade, and postoperative hemorrhage. A specialized resuscitation protocol utilizing emergent resternotomy (RS) with internal cardiac massage for postoperative cardiac surgical arrests has been recommended for adoption in American cardiothoracic surgery programs.

Purpose: The purpose of this project is to evaluate resuscitation practice trends and the impact on patient outcomes for those who underwent RS as a method of resuscitation, compared with standardized resuscitation, among those who underwent cardiac surgery and developed a postoperative cardiac arrest.

Methods: A two-group comparison study was designed that retrospectively analyzed 117 patients who developed a postoperative cardiac arrest between 2009-2016 and either received a RS or a standardized resuscitation.

Results: Of the 117 patients reviewed between 2009-2016, 27.5% patients underwent a RS. A structured RS protocol was implemented in 2011, 5.4% of patients were resuscitated with RS and survived to hospital discharge between 2011 to 2016, compared to 0% survival of patients prior to such protocol (2009-2011). The major causes of cardiac arrest were different between RS group and non-RS group as arrhythmia and bleeding versus arrhythmia and respiratory arrest. The discharge survival rates were lower in the RS group (22.2%) vs. non-RS group (44.2%) (p=0.05). However, ICU and overall hospital lengths of stay (LOS) were shorter in the RS group than non-RS group (17.4 days vs. 22.9 days, p=0.05).

Conclusion: The survival rate improved with a structured RS protocol. The survival rate was lower in the RS group than the non-RS group; however, in individuals who survived greater than 24hrs, the patient outcomes were better with shorter LOSs in both ICU and hospitalization. A structured RS protocol should be considered in additional to standardized resuscitation for postoperative cardiac surgical arrests.
*Evaluation of an international staff exchange between two social service agencies in Virginia and Germany*

Matthias Naleppa  
*School of Social Work*

**Abstract:**

This presentation highlights findings from an empirical evaluation of an agency-to-agency staff exchange program between a Virginia-based and a German non-profit social service agency. The program’s 12 year history, challenges and successes are presented. Two focus groups (n=5; n=7) and in-depth interviews (n=4) were conducted in the US and Germany. German focus group and interview data were translated into English. Data analysis followed selective transcribing and thematic analysis procedures. Member checking and peer-debriefing were used to increase the credibility and validity of themes, and to reduce distortion and researcher bias. Key findings include: (1) support from leadership and staff impacts sustainability; (2) development of collaboration principles is key for continued partnership; (3) financial input is small when compared to outcomes; (4) traveling abroad and hosting fosters positive learning experiences; (5) agencies learned to better position themselves and increased their retention; (6) themes among staff include observing, reflecting, and learning from each other.
*Health care problems, choice of provider and helpfulness of treatments in Virginia chiropractic patients*

Virginia Weisz  
*School of Nursing*  
Frank Dane  
*Jefferson College of Health Sciences*

**Abstract:**

Rural populations face obstacles and disparities not experienced by those in urban settings, including a higher prevalence of chronic disease and limited access to health care providers. Rural residents visit Doctors of Chiropractic (DCs) more frequently, with some using a DC as a regular health care provider. Chiropractic manipulation is one of the most commonly used complementary and alternative medicine (CAM) therapies. This study employed a modified version of the International CAM questionnaire (I-CAM-Q) to explore demographic profiles, major reported health problems, CAM and conventional treatments, and the perceived helpfulness of these treatments for these health problems. Data were collected from a convenience sample of 312 chiropractic patients in eleven chiropractic offices across a diverse geographic area throughout Virginia, compared using 2013 Rural-Urban Continuum Codes. Respondents tended to be employed, insured, had an income greater than $35,000 per year, and reported generally good to very good health. Participants from all geographic areas tended to use either a DC or a medical provider or both as a regular source of health care, with a DC used as a regular health care provider significantly more often than a medical provider (53% versus 22%; p = 0.01) for regular health care visits. There were no significant differences between metropolitan and non-metropolitan areas in the use of a DC as a regular health care provider. Study participants reported more chronic compared with acute health problems (72%), and 73% of problems were for pain-related issues. Reported health conditions included back pain, neck pain, headaches, shoulder pain, arthritis, mood disorders, hypertension, diabetes and sinus problems. Those in non-metropolitan areas rated their health as poorer, had lower education levels, were employed less and had higher rates of disability compared with those in metropolitan areas (p = 0.05). A secondary analysis of these data will be available in February.
Life Satisfaction Among Women Entrepreneurs in Southwest Virginia

Ali-Sha Alleman     School of Social Work

Abstract:

The importance of life satisfaction has compelled working-women to find alternatives to the traditional workplace. Using a phenomenological approach, this qualitative study examines the life satisfaction of 12 women entrepreneurs relative to their lived experiences, between the ages of 25-65 who have left the traditional workplace and have been in business for at least five years. A multidimensional conceptual framework including Resilience theory and Life Satisfaction was used for this study.

By using snowball and purposive sampling, Southwest Virginia women entrepreneurs were identified and then asked to refer other participants. Narratives of participants’ lived experiences were captured using semi-structured interviews. This study examined the following questions: 1) How is life satisfaction perceived by women entrepreneurs versus as employees? 2) What are the lived experiences of women entrepreneurs? 3) What motivates women entrepreneurs to become entrepreneurs? Narratives were analyzed using content analysis to identify reoccurring themes, in conjunction with coding to categorize broader themes into sub themes. Podium presentation will discuss data collection and preliminary findings.
Mission Possible: Best practice approach to developing a nursing/OT IPE simulation experience

Christina Keller  
Laura Miear  
Katrina Watson  
Cindy Cunningham  
Judith Malek-Ismail  

School of Nursing  
Department of Occupational Therapy  
School of Nursing  
School of Nursing  
Department of Occupational Therapy

Abstract:

Background: Utilizing best practice methods when developing IPE simulation experiences assists faculty in designing and implementing meaningful learning opportunities for healthcare students and also enhances patient safety. Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) is a system designed by the Department of Defense and the Agency for Healthcare Research and Quality to improve collaboration and communication related to patient safety. Applying the TeamSTEPPS training method with simulation can assist faculty in avoiding some of the common pitfalls encountered when coordinating an IPE simulation experience.

Method: When developing the simulation scenario, the TeamSTEPPS approach was applied in the following order of events. First, the faculty identified areas of weakness in teamwork skills. Next, the learning objectives were written. The clinical context was then chosen. Graduate level OT students and Level 4 nursing students (last semester of their nursing program) will participate in the simulated scenario of caring for a geriatric patient suffering from a hip fracture in the acute care hospital setting. The scenario events will be identified. Then the final step in implementing the simulation will be to define the targeted, intended responses of the learners.

Results: This simulation experience is a work in progress and will be implemented in March 2018 at the Radford University Clinical Simulation Center. A simulation specialist will ensure the simulation meets International Nursing Association for Clinical Simulation and Learning (INACSL) Standards of Best Practice: Standard VII, Participant Assessment and Evaluation guidelines for formative assessment. Both nursing and OT faculty will be present for the simulation experiences to provide descriptive feedback and facilitate reflection and discussion. Students will be administered a pre and post encounter survey. Faculty plans to meet after the experience to identify any areas of improvement for future IPE simulation experiences.
Modeling women’s reproductive health of women in Appalachian region: A sustainability perspective

Mashooq Salehin

Abstract:

Communities of this region have been experiencing adverse environmental effects of coal mining and chemical industries due to exposure to toxicants and destruction of ecological resources (Haynes, Heckel, & Ryan, 2010; Hendryx & Ahern, 2009;). This paper attempts to theorize the reproductive health of women living in the Appalachian region using sustainability perspective in the context of growth-focused economic development model which in general, has limited capacity to ensure social and economic justice affecting women’s reproductive health. This theoretical framework also explains the speculative relationship between reproductive health and its socio-economic and ecological correlates. Using Sen’s (1979, 1992) capability approach, Grossman’s health production theory (1972) and Gidden’s theory of structuration (1984), this theoretical model explains how Appalachian women’s reproductive health capabilities and their health functioning, are influenced by key components of sustainability such as, reproductive decision-making power and ecological resources against the backdrop of this ecologically vulnerable region.
*Review of a Heart Failure-Depression Bundle*

Susan Davis

Megan Hebdon

School of Nursing

School of Nursing

Abstract:

Purposes/Aims: The purpose of this quality improvement project was to implement and assess a Heart Failure (HF)-Depression Bundle on 2 inpatient units, focusing on depressive symptom screening, and recommendations for interventions, referrals, and follow-up care for HF patients.

Introduction/Background: Diagnosed HF patients experience recurrent hospitalizations, less time between hospitalizations, and increased the length of stay. When having comorbid depressive symptoms, the management of HF is more challenging. Studies have demonstrated increased mortality rates for HF patients with depression. Hospital interventions provided to those with HF and depressive symptoms may promote improved patient outcomes.

Methods: Over six weeks, a nurse-directed HF Depression Bundle was implemented on 2 hospital units. HF patients were screened for depressive symptoms using the PHQ-9, and were then classified by severity. Using the bundle protocol, nurses recommended interventions, referrals, or discharge follow-up based on depressive symptom severity. Patient characteristics, PHQ-9 score, ejection fraction, patients screened, and those needing interventions or referrals were recorded by nursing. Readmission rates and lengths of stay before and after bundle implementation were collected using electronic health record and organizational level data. A post bundle implementation questionnaire was completed by nursing and evaluated using qualitative content analysis. Quantitative data was analyzed for descriptive statistics and simple correlations.

Results: Data analysis is in progress.

Discussion: Implementation of the HF-Depression bundle addressed unit level outcomes related to screening for depressive symptoms, interventions, and referrals. The findings suggest a relationship between depressive symptoms and HF severity. The nurses’ implementation evaluation addresses the necessity for a streamlined approach to screen depressive symptoms for referrals, and follow-up. These findings highlight an area of care where process changes and further research could improve HF outcomes.

Keywords: heart failure, depressive symptoms, outcomes, interventions, protocol
Robotic Surgery: Prostatectomy Surgical Approach Comparison

Vickie Taylor

School Of Nursing

Abstract:

Objective: Retrospectively compared the impact of a robotic-assisted radical prostatectomy (RARP) program (single surgeon) and open radical prostatectomy (ORP) for the first year of inception within an independent community hospital.

Methods: From October 25, 2016 to October 25, 2017, a total of 59 men underwent either a RARP or ORP. The key endpoints of interest included: patient demographics (age, BMI, insurance type, and ethnicity), operative outcomes (surgical room time, surgical procedural time, and estimated blood loss), perioperative outcomes (recovery room length of stay, transfusion rates, post-op pain, complication rates, and overall hospital length of stay), and cost (direct procedural costs and direct hospital costs).

Results: In comparison of 36 robotic-assisted radical prostatectomies and 23 open radical prostatectomies, the mean surgical room time was longer for RARP (2.90 hours +/- .49) compared with ORP (2.27 hours +/- .36, p = .000). The mean surgical procedural time was longer for RARP (2.24 hours +/- .42) compared with ORP (1.31 hours +/- .38, p = .000). Mean estimated blood loss for RARP (145.14 mL +/- 67.83) compared with ORP (219.05 mL +/- 301.45) with one outlier data point of 1400mL reported for an open radical prostatectomy with lymph node dissection. The cost endpoints of comparison were statically significant as well with the mean direct procedural cost reported as greater for RARP ($3038.69 +/- 399.04) compared with ORP ($834.33 +/- 51.51, p = .000). The overall hospital direct cost mean was greater for RARP ($6777.69 +/- 993.14) compared with ORP ($5070.44 +/- 590.30, p = .000).

Conclusions: During the first year of inception of a robotic-assisted prostatectomy program, outcomes showed longer surgical room time and surgical procedural time, ultimately resulting in greater costs. However, the quality key outcomes of EBL, recovery length of stay, and hospital length of stay were consistent with the ORP.
Seeing Through a New Lens: Memory Aiding Prosthesis and the Future of Healthcare

Cassidy McRorie  
Megan Hebdon  

School of Nursing  
School of Nursing

Abstract:

Introduction: Chemotherapy-related cognitive impairment is a significant side effect or late effect of chemotherapy that affects daily functioning of cancer survivors. Clinical manifestations include: difficulty concentrating; trouble remembering specific details such as dates, times, names and occasionally larger events; and even difficulty recalling common words. The cause of this condition remains unknown, although the impact on patient quality of life is significant. The purpose of this study is twofold: first to examine the current knowledge of health care providers in regards to chemotherapy-related cognitive impairment; second, to assess the attitudes of healthcare providers in relation to the use of memory prosthesis glasses in individuals with chemotherapy-related cognitive impairment.

Method(s): Data will be obtained through an electronic cross-sectional survey based on the Technology Acceptance Model that will be sent to healthcare providers and healthcare providers in training. Through multiple choice, likert scale, and open-ended response questions, the survey will address demographics, basic knowledge of chemotherapy-related cognitive impairment, and attitudes toward the use of smart glasses as a memory aid in chemotherapy-related cognitive impairment.

Results: Researchers are in the process of data collection. Once all data is obtained from the target population, the responses will be analyzed using a descriptive qualitative approach for open-ended response questions. Quantitative data will be evaluated using SPSS for descriptive and inferential statistics.

Discussion & Conclusions: The substantial impact it places on the lives of cancer survivors requires that healthcare providers both understand the condition and are aware of supportive treatment options. Wearable technologies are a novel, patient-centered approach to care, but can only be effective if designed to meet the needs of consumers and health care providers. Through understanding the knowledge health care providers have of chemotherapy-related cognitive impairment and their perceptions of smart glasses as a memory aid, smart glasses can be effectively designed to promote positive patient outcomes in this condition.
Substance Abuse: A Campus Crisis

Virginia Burggrass  
School of Nursing

Abstract:

Substance abuse is no stranger to college campuses. On January 11, Radford University presented an Interprofessional Conference addressing this issue on their campus. Presentations by many departments provided the factors that contribute to student exploration of drugs. Treatment options were also discussed. This presentation will detail these interprofessional efforts.
*The Paradigm of Prehabilitation: A Systematic Review of Therapeutic Validity*

Alana Dudek  
Department of Physical Therapy  
William Kolb  
Department of Physical Therapy

Abstract:

The Theory of Prehabilitation provided a bright beacon of hope for the medical community. Essentially, if you improved a patient's functional ability before surgery (prehabilitation), the patient would be better prepared to handle the stress of the procedure, resulting in improved postoperative rehabilitation and a quicker return to functional independence. Past research for prehabilitation has produced inconsistent responses, possibly due to the variety of interventions all deemed Physical Therapy (PT). In order to evaluate PT interventions being utilized in numerous studies, the concept of Therapeutic Validity was created. When there is low therapeutic validity, it results in multiple studies being defined as the same, when in fact the exercises, intensities, subject selection, and patient adherences are dramatically different and not specific to the target population. This results in a lower overall effectiveness of the intervention of PT provided during research. The purpose of this systematic review was to examine the therapeutic validity in randomized controlled studies of prehabilitation in subjects undergoing total knee replacements. Seven databases were searched up to September 2017, resulting in 18 eligible studies. Applying proven therapeutic validity criteria, only two studies were rated as valid and eight scored two points or less out of nine. This demonstrates the lack of quality research design in the field, with results from studies that may underestimate prehabilitation benefits. Future research design should consider therapeutic validity while developing protocols to ensure beneficial or harmful programs are not being masked due to low quality studies.
The Waldron College Interprofessional Education and Practice Symposium: Past, Present, and Future

Sheila Krajnik  
*Department of Occupational Therapy*

Kerry Vandergrift  
*School of Social Work*

Abstract:

Radford University’s Waldron College of Health and Human Services has hosted an annual Interprofessional Education and Practice Symposium (WCIPEPS) each fall since 2011. The half day event brings an opportunity for students and faculty from the five units in Waldron College (WC) and several professions outside of WC, to learn about, from, and with one another, in the context of a case-based, problem-solving learning activity. This presentation is two-fold. First, it will address how interprofessional education (IPE) across higher education has evolved since WCIPEPS began. Secondly, it will put forth how those changes combined with recent intensive data analysis might alter the symposia’s structure and how data are collected going forward.

Several factors should be considered as the future landscape of IPE at Radford University is planned out. There has been a shift from students’ knowledge of, and beliefs and attitudes for interprofessional learning, toward addressing behaviors and skills in IP communication and client care in real or simulated contexts is emerging (Fernandes, Palombella, Salfi, & Wainman, 2015; Shoemaker, Platko, Cleghorn, & Booth, 2014). Additionally, there is greater emphasis on the need for faculty development with regards to providing high quality IPE (Loversidge & Demb, 2015; Watkins, 2016). Using a mixed methods design, data were collected during each symposia from 2012-2017, using a 31 Likert-item pre/post-questionnaire and four open-ended questions. Data analysis of the 2013-2017 WCIPEPS events, facilitated by a statistician not associated with WC, is revealing a need for increased rigor in data collection methods to enhance validity of findings. Lastly, WC now has a Center for Interprofessional Education that, although in its early phase of development, can be utilized to unify and expand the integration of IPE into the curricula across health and human services disciplines, not only in WC but throughout Radford University.
Our Path to Success in Uniting Three Professions in an Unfolding Simulation Case in the Home Environment

Cunningham, Cynthia  
Cunningham, Shala  
Gilbert, Sarah

School of Nursing
Department of Physical Therapy
School of Nursing

Interprofessional practice is essential for disciplines who may encounter each other in a home health situation. A Standardized Patient scenario was developed by the Simulation Center that included Nursing, Physical Therapy, and Emergency Medical Service students. Students report increased comfort and knowledge in reporting and collaboration with other disciplines after the exercise. Additionally, students report learning more about the other disciplines through exploration of their patient care focus.
Poster Presentations

[*] indicates session has earned Peer Review designation
*Assessing the Relationship Between Crutch Height and Patient Height*

Drazan Vukovic  
*George Mason University*

Angela Mickle  
*Department of Health and Human Performance*

Kelly Harman  
*Department of Health and Human Performance*

**Abstract:**

A pair of incorrectly fit crutches can place abnormal stresses on the body thus predisposing the individual using them to musculoskeletal and neurovascular disorders. Such complications can lengthen recovery and lead to newly developed pathologies.

**Objective:** The purpose of this study is to determine how well crutches are fit when only taking an individual’s height value into account.

**Participants and Methods:** Fifty adult participants (20 female, 30 males mean age = 22.64 yrs) were recruited and had their height measured using a standard stadiometer. Each individual was asked to stand shoulder-width apart and instructed to place the tip of the crutch two inches in front and six inches away from the outer margin of the experimental side’s foot. Crutches were set to the height obtained with the stadiometer and the fit was determined by the accepted practice noted by Prentice (2016).

**Outcomes:** The primary outcome measure was whether, when crutches were adjusted to verified patient height they could were properly fit.

**Results:** In 58% of all trials, crutches were not properly fit based upon height alone. Of those that were incorrectly fit, 42% were too low.

**Clinical implications:** It is vital that individuals fitting patients for crutches appropriately verify the fit of the crutch rather than relying solely on adjusting the crutch for patient height.
Burnout in Hospice

Caitlin Stump

School of Social Work

Abstract:

The purpose of this paper is to explore how the presence of burnout within hospice agencies affects both employees and clients through an analysis of research, theory, policy, and practice. This paper will use a critical literature review and an examination of social work values and ethics to demonstrate and understand the effects of burnout within the hospice field and on hospice care overall. Data collected from a local non-profit hospice agency, Good Samaritan Hospice, will also be utilized. Administrative policies within this agency will also be explored in their relation to assisting and preventing burnout. The paper will seek to understand burnout and its effects on employees and client care using the systems, self-determination, and conservation of resource theories, addressing both the micro and macro levels. In regards to practice, best practice methods in preventing burnout, such as the use of meditation, will be discussed.
Comparative Healthcare System and Health Issues between S. Korea/ Taiwan and the U.S. through Study Abroad

Cassidy McRorie  
Eunyoung Lee

School of Nursing

Abstract:

Purpose: Study abroad program was initiated with Taiwan and Korea to bring the learning opportunities to compare the different healthcare system, healthcare practice and health issues with ones in the U.S. and to bring the innovative ideas to improve health care in the local community.

Methods: School of Nursing at Radford University established the Memorandum of Universities with Yonsei-University in S. Korea and Chang Gung University in Taiwan in 2013 and 2016, respectively. Through the two weeks short-term stay in the individual hosting countries, the visiting students and faculty participated in didactic lectures, clinical practicum, and the dynamic discussion/ symposium/ presentation and visited the local community hospitals and clinics.

Results: Through the four exchanged programs between 2013 and 2017, Radford nursing students had the opportunities to compare the health care delivery systems and health issues including access to care and health cost between S. Korea, Taiwan, and the U.S. through class observation, clinical site visits, symposium, and cultural activities. Students and faculty from both countries also had opportunities to share their cultures and develop the global friendship with international studies. The different innovative ideas and the good practice in the education and clinical practice observed from the other countries were reflected through their final report and in-depth discussion and debriefing sessions.

Conclusion/Clinical Implication: The ideas and experiences learned from the study abroad student exchange program can provide the seeds to initiate discussion and to change the practice to improve the quality of care and health delivery system in the local community in their own countries.
Depression in Collegiate Athletes: Literature Review and Recommendations for Athletic Trainers to Improve Patient Care

David Parmer  Department of Health and Human Performance
Ellen Payne  Department of Health and Human Performance

Abstract:

Clinical Depression is a mood disorder characterized by a state of prolonged hopelessness and loss of function in activities of daily life. Depression is a growing concern in collegiate athletics. It is identified more in athletes now than previously for many reasons including better diagnosis, better reporting to the medical staff, and reduced stigma. The increased prevalence of depression and concern for the psychosocial well-being of athletes needs to be met with more research and education to improve patient care by the sports medicine health care providers. A literature review was done of depression consisting of keywords: mental depression, athletics, athlete, health care providers, and anxiety. Research on depression has been lacking until recently, but more research is emerging. Education of health care providers and the public on depression will increase the ability to properly treat patients who suffer from this mood disorder. The athletic trainer has a significant role on the sports medicine team because of their daily interaction with athletes. This makes the athletic trainer in position to monitor and refer the athlete as needed. Social support from athletic trainers, screening during pre-participation exams, and education of health care providers are three simple ways to help improve care for athletes with depression. This poster will summarize the current research related to depression in collegiate athletics and provide recommendations for athletic trainers to help improve the psychosocial well-being of their patients.
**Effect of Exercise Duration and Fatigue on King-Devick and Balance**

Erica Boggs  
Andrea Stanley  
Olivia Willson  
Rachel Andrews  

*Department of Physical Therapy*

**Abstract:**

Purpose: To determine if exercise duration and fatigue effects King-Devick (K-D) scores and/or balance

Subjects: 10 (6 females), 18-26 years, divided into 2 groups based on exercise duration

Methods: K-D and Modified Clinical Test of Sensory Interaction in Balance (M-CTSIB) scores were obtained immediately before and after exercise. The exercise protocol consisted of a 2-minute warm-up followed by rowing to a metronome at 75 bpm. Every two minutes, the pace increased one bpm until subjects reached fatigue, meeting three of four criteria: 90% MaxHR, inability to maintain pace for three consecutive pulls to the abdomen, 17/20 on RPE scale, and/or inability to maintain form.

Results: Fifty-percent of subjects exhibited positive post-K-D; however, pre- and post-K-D times were not different between groups (p=0.05). Both groups demonstrated poorer balance in post-M-CTSIB composite scores (p=0.05). T-tests between groups determined no difference in balance deficits after fatigue (p=0.05). No correlation exists between exercise duration and K-D (p=0.05). A positive correlation exists between duration and difference in percent impairment on a firm surface with eyes open (R=0.674, p=0.05).

Conclusions: Administration of K-D after intense exercise shows fatigue may impair eye-movement function and cause false-positive scores regardless of exercise duration. Data warrants a predictive relationship in which longer exercise duration yields poorer balance. This agrees with previous studies, which found an inverse relationship between fatigue and balance attributed to reduced neural drive. Further studies may determine an adequate rest period before testing to allow the body to accommodate for adverse effects of fatigue.

Clinical Relevance: Research shows fatigue can negatively impact visual performance and neuromuscular control; however, no research has been conducted to determine if fatigue may result in false-positive K-D scores and/or deficits in balance by mimicking suboptimal brain function seen in concussions.
Abstract:

The purpose of this literature review is to explore how cannabinoids compared to opioids are affecting the pain and quality of life in cancer patients. Current practice demonstrates that not enough research has been done and studies have been limited. This is due to the fact that it is an illegal substance. The method used was a literature search conducted using Radford University’s McConnell Library Super Search tool. Limits were set to find articles from the years 2012 to 2017, and peer reviewed articles. A total of 25 articles were available with 15 showing relevance to the topic. The results of the literature review showed that the use of cannabinoids has been helpful in aiding cancer patients with their pain levels with few adverse reactions. It was also shown to improve quality of life.

Keywords: Cannabinoids, opioids, cancer, pain, therapy, THC/CBD, nabiximols, adverse effects, analgesics, quality of life.
*Elbow Ulnar Collateral Ligament Characteristics of Collegiate Baseball Players Using Sonography: Theory Report*

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Brent Harper  

*Department of Physical Therapy*

**Abstract:**

Background: Overhead throwing places a large stress on the medial aspect of the elbow. The ulnar collateral ligament (UCL), particularly the anterior band of the UCL is the dynamic stabilizer of the elbow during the large valgus stress that occurs during an overhead baseball throw. 1 Repetitive overhead throwing results in microtrauma to the UCL and can result in a significant tear requiring surgical intervention. UCL reconstructive surgery (UCL-R) is commonly known as Tommy John Surgery; UCL-R has become increasingly more common in baseball players, specifically pitchers. 2 Many researchers have attempted to identify risk factors that may contribute to UCL injury. 1-7 Ultrasonographic (US) imaging is a technique that is commonly used to confirm UCL injury, yet it is used infrequently with asymptomatic individuals.

Purpose and Aim of Project: Previous studies 3-7 have measured UCL thickness values in professional and high school baseball pitchers using US. Asymptomatic professional baseball pitchers demonstrated greater UCL thickness, larger gapping during an elbow valgus stress test, and increased incidence of hypoechoic foci and calcifications within the UCL on the throwing arm compared to non-throwing arm. 3-5 Yet when examining high school baseball pitchers, researchers demonstrated equal UCL thickness, gapping during valgus stress test, and incidence calcifications within the UCL comparing bilaterally. 6 The majority of UCL-Rs occur between the ages of 15-19 years, and specifically while on collegiate teams compared to professional and high school. 1-7 There are no current studies on measuring UCL thickness and tissue characteristics of the UCL in collegiate baseball pitchers. Using US to examine the UCL could potentially identify those at risk for developing UCL tears. The aim of this project is to measure UCL thickness in collegiate baseball pitchers pre- and post-season while also tracking injury incidence recruited from local university team. The study will submit to Radford's IRB prior to data collection.
End-of-Life Care: Implications for Social Work

Tammy Epperly  
School of Social Work

Abstract:

Communication is an ongoing challenge for practitioners in working with patients and families diagnosed with a life-threatening illness and faced with making end-of-life decisions. A patient's quality of life in meeting these decisions can be emotionally overwhelming for themselves and their family yet curative care continues to be offered by most practitioners and comfort care is seen as a last resort. A systematic literature review was explored to gain an understanding of the barriers; practitioners, patients, and families face when confronted with end-of-life care decisions. Findings will include the practitioner level of comfort in communicating a terminal diagnosis and the fallacy felt by both patient and family is to not give up on curative medicine. The theoretical frameworks of Family Life Cycle, Symbolic Interactionism, and Rational Choice will provide a lens to the significance advance care planning has when facing end-of-life care decisions. The objective of this study will be to explore the best practices and implications a social worker has in working with an interdisciplinary team, patients, and families in implementing end-of-life care. This collaboration will be resourceful in respecting and acknowledging the patient's wishes to end-of-life treatment. Exploration of advance care planning policies and procedures will gain insight in clarifying the role of a social worker in end-of-life care. This study reiterates implications of social work values and ethics in advance care planning and practices while advocating for social justice in end-of-life care issues and concerns.
Experienced Burnout Among Veteran Affairs Social Workers

Rachelle Willis

School of Social Work

Abstract:

Since burnout can have adverse consequences to a practitioner's health along with their competency in the workplace it is important to identify how burnout is experienced in specific work environments, rather than through a collective profession. This study sought out to develop a deeper understanding of how burnout is experienced by social workers employed at a Veteran Affairs (VA) facility in Virginia. Burnout was measured utilizing the average scores from the VA's annual All Employee Survey (AES) for the 2015, 2016, and 2017 fiscal years. Within this voluntary survey the occurrence of burnout among employees was broken down into the three primary dimensions of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment that are utilized to determine its severity. Questions utilized within this survey to measure burnout came directly from the Maslach Burnout Inventory, the most widely used scale to measure burnout. An analysis of variance test (ANOVA) was conducted at the p= 0.05 level to determine the main effects between each dimension of burnout and time. The ANOVA and honest significant difference (HSD) post hoc test revealed that each of the three dimensions of burnout changed over time independently from each other. The dimensions of emotional exhaustion and depersonalization both increased between the 2015 and 2016 fiscal years, but significantly decreased in 2017. The dimension of reduced personal accomplishment was found to consistently increase each fiscal year. Through an increased understanding of how burnout is experienced more efficient coping strategies can be identified to address and prevent its future occurrence.
Factors Affecting Children’s Adjustment in Foster Care

Anne Jacobsen

School of Social Work

Abstract:

This exploratory study highlights research on the foster care system in the United States. Qualitative interviews of foster care caseworkers provide a more detailed look at the foster care system in the New River Valley of Virginia. This study finds that positive outcomes and healthy attachment are more likely for foster children when there is a supportive foster care system that includes: good teamwork, communicative families, and adequate support and services for children and families. Critical, systems, and attachment theories are used as frameworks for exploring the population of children who come into care, children’s development, and the complex foster care system. Policies and practices provide further insight into how to guide children’s development and encourage strong bonds while in the foster care system. Children who come into foster care often come from disadvantaged backgrounds; therefore, it is important to consider diversity, and social and economic justice through the values and ethics of the social work profession. Social workers working in the context of community-based family practice must explore and implement effective practices, which will ensure that foster children grow up as mentally, physically, and emotionally thriving as possible.
*FAITH-Based Health Program Impact on Hypertension in Members of an African-American Community Church*

Trinay Hogan  
*School of Nursing*

**Abstract:**

**Problem and Significance:** In the United States, hypertension affects one in every three adults (CDC, 2016). Uncontrolled hypertension is often one of the precursors for other leading causes of death in the U.S., such as heart attacks or strokes. Although this health concern can affect all ethnicities, statistically African-Americans experience a higher prevalence of hypertension.

**Purpose:** The purpose of this project is to elicit a reduction in high blood pressure and increase cardiovascular disease knowledge in the African-American population in the community.

**Method:** A local faith-based organization will be utilized as the site of program activities as it offers a place of frequent interaction in a trusted environment. Over the course of eight weeks, subjects will participate in a multifactorial program consisting of the education of cardiovascular disease and prevention, DASH diet education and implementation, and weekly physical activity opportunities.

**Sample:** One group will be assessed pre and post intervention for reductions in systolic and diastolic blood pressure and an increase in cardiovascular knowledge. Secondary outcomes of weight and body mass index reduction with self-reported increases in physical activity and fruit and vegetable intake will also be assessed.

**Limitations:** The local church contains a small number of members that attend church regularly. It is possible that the study may be limited in its ability for generalization due to sample size. Dropout rate and/or ineffective outcomes may also be concerning as church attendance and study participation is not mandatory.

**Application to Practice:** Advanced Nurse Practitioners will find that health promotion and implementation outside of normal practice areas can enhance patient outcomes in a matter of weeks.

**Keywords:** African-American, hypertension, DASH diet, faith-based organizations, physical activity
**Forgotten Children: Children & Youth in Foster Care with Disabilities**

Deneen Evans  
Tammy Epperly  
Lisa Williams  
Katla Figgatt  

*School of Social Work*

Abstract:

There are more than half a million children and youth in foster care in the United States, and studies suggest that at least one-third have disabilities, ranging from minor developmental delays to significant mental and physical disabilities. Evidence suggests, however, that the special needs of this population are not being met in foster care systems across the country, and that these children experience worse outcomes than other children in foster care. Child protection investigators and foster care caseworkers are not typically provided with sufficient training, tools and support to ensure the identification and assessment of children and youth with disabilities. This may result in underreporting, inappropriate placement decisions and inadequate provision of services for children and youth with disabilities in foster care. Foster and adoptive parents are routinely underprepared for the challenges associated with caring for children and youth with disabilities. They may not have received training to help them effectively parent children and youth with different disabilities, or advocate for their special medical and educational needs. The presenters will discuss the results of a targeted training program conducted for New River Valley foster care workers, foster care parents and Child Welfare stipend students to address the psychosocial and mental health needs of foster children with disabilities. The training was funded through a grant by the King Foundation.
*Forgotten Children: Children & Youth with Disabilities in the Foster Care System*

Deneen Evans  
Tammy Epperly  
Erica Thornton  
Lisa Williams  
*School of Social Work*

Abstract:

To educate and prepare foster care workers to meet the psychosocial and mental health needs of foster care children diagnosed with disabilities.

Goals:

To increase knowledge among foster care workers about the needs of children and youth living with disabilities.

To increase knowledge among foster care parents about the psychosocial and mental health needs of foster children with disabilities.

To increase knowledge base of MSW Child Welfare Stipend students about the special needs of children with disabilities.
*HIV/AIDS Prevention in the Older Adult Population*

Katherine Jennings
Bray Nemetz-Gardner
Jermisha Woolridge

School of Nursing

Abstract:

The purpose of this research paper is to evaluate the current Human Immunodeficiency Virus (HIV) preventative interventions associated with older individuals and their effectiveness. Research has shown that there has been a lack of preventative education provided to older adults due to many different factors including ageism, providers, lack of time, and that this information is not seen as a priority. Preventative education that has been proven to be effective in educating older adults on this topic are pamphlets, educational programs provided by health care professionals, and education on the importance on getting tested. These educational tools are available already but unfortunately, they are rarely implemented or are only made available to younger individuals. Not only should education be focused on preventing HIV but education should also be made available for those who have the disease so they can live a long life without transmitting their disease to others. Keywords: HIV, AIDS, prevention, older adult, education
*How occupational therapy practitioners utilize the CarFit 1:1 model to provide driver safety education to seniors in the state of Virginia*

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*Department of Occupational Therapy*  
Laura Miear  
*Department of Occupational Therapy*

**Abstract:**

Personal mobility is essential for productive aging. The ability of an older adult to move about their community to shop for personal goods and services and for recreation and socialization is essential for full participation in all aspects of life. The older driver may consciously terminate the occupation of driving to due to changes in his/her physical function. CarFit is nationally recognized, free educational program that helps seniors find a safe and comfortable fit in their vehicles. The program provides safety information and educates the senior driver on resources to enhance their safety and community mobility. A review of the literature revealed no current or past studies related to the use of the CarFit 1:1 model by occupational therapists in any clinical practice setting. The CarFit administration recently discovered that the number of seniors participating in this program is rapidly declining. According to the CarFit registry, there are over 100 occupational therapists in Virginia who are trained as CarFit Technicians or CarFit Event Coordinators. The purpose of this online survey will be to determine the number of occupational therapists in the state of Virginia who use the CarFit 1:1 model in their clinical practice and its effectiveness. The online survey will commence in late January, 2018, with results analyzed by mid-April 2018. Through this study, the investigators will seek to discover the barriers to using the CarFit 1:1 model in conjunction with clinical practice to determine how frequently the 1:1 model is used in clinical practice, the range of practice settings in which this model is used, whether this model appears to be effective, and if the occupational therapists are considering the 1:1 model as a billable service. The future goal from these findings is to increase access to this program by seniors in Virginia and across the country.
Importance of Concussion Education in the Secondary School Athletic Population

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Department of Health and Human Performance
Department of Health and Human Performance

Abstract:

A sport related concussion is a traumatic brain injury induced by biomechanical forces, like a direct blow to the head, face, neck, or elsewhere on the body with an impulsive force transmitted to the head. There have been many studies conducted on concussion education and its ability to increase knowledge of signs and symptoms of a concussion. We know that knowledge of concussions is important, but currently there is no gold standard concussion education program for the secondary school athletic population. Many states have passed laws requiring schools to provide concussion education to student-athletes and other individuals involved in sports, such as parents and coaches. Most secondary school student-athletes still lack comprehensive concussion knowledge and many concussions go unreported, only increasing the risk of potential, greater health problems. The research emphasizes that concussion education is important, but having an athlete retain and apply the knowledge is something that needs to be addressed. If a culture could be created that puts stresses the importance of reporting concussions and refraining from participation, along with the potential long-term consequences then student-athletes would be able to see how serious concussions can be. What is also unknown is how to modify athlete behavior to prevent concussions and increase concussion reporting. This poster will review the current literature related to concussion education for secondary school student-athletes. The poster will include recommendations for future concussion education based on the research including the effects of education during the athletic season, not just during pre-season. This could potentially help with knowledge retention and possible behavior modification.
Incarcerated Women and Pregnancy Care

Alison Cole  
Claudia Eubanks

School of Nursing

Abstract:

While there are some laws in place for caring for pregnant women while they are incarcerated, they are not strictly enforced by the government. This leaves the implementation process of maternity care for pregnant inmates to the prison facilities. Although there are programs that help pregnant incarcerated women, such as Mothering from the Start, prenatal yoga, Healthy New Mothers, and Prison Nurseries, there is a lack in consistent care in providing safety, adequate nutrition and rest, education, and psychosocial needs among prisons. This can consequently result in poor health outcomes for both the mother and her baby. Effective prenatal, antepartum, and postpartum care are essential to the future health for mother and child. The inadequate care that pregnant inmates receive while incarcerated is a significant deficit in our prison systems that must be addressed. The status of being incarcerated has unfortunately dictated the level of health care the mother and her baby receive during this critical stage of life.

Keywords: pregnancy, healthcare, prison, laws, incarcerated, maternity, inmates, baby, safety, nutrition, health, prenatal, postpartum, antepartum, pregnant, education
**Infant Cord Care**

Kate Bryan  
Itzel Carino  
Brooke Thomas  

_School of Nursing_  

**Abstract:**

Objectives: The purpose of this study was to identify the best cord care method to prevent infections in infant umbilical cords. The methods researched were dry cord care vs. antiseptic cord care. The current method used in Carilion Roanoke Memorial Hospital is dry cord care.

Methods: The literature search conducted used the keywords: infant cord care, dry cord care, and antiseptic cord care. The number of articles found was: 7,242. The language of publication was limited to English. After reviewing and setting limits of 5 year time span from 2012 to 2017 and scholarly peer reviewed articles, the number of articles decreased to 2,098 articles. Three articles were reviewed and included the following components infant cord care, dry method cord care, antiseptic method cord care.

Results: In one study, 8698 participants were observed and it was concluded that using dry cord care was not only most effective but also less expensive and preferred over using antiseptic cord care. However, it did conclude that if infants were born in a lower socioeconomic society that they should use chlorhexidine. Another study of 803 participants resulted in the same conclusion that dry cord was more effective than antiseptic cord care. The third study reviewed looked at 15 different countries and their usual methods for cord care. This study recommended using chlorhexidine over the various substances used traditionally in their culture.

Conclusion: These studies concluded that the use of dry cord care was not only more effective at preventing infections, but also less expensive and preferred. However, they did agree that the use of chlorhexidine in lower socioeconomic countries was preferred.

Keywords: infant, cord care, dry cord care, antiseptic cord care
Innovative Interventions Within the Elderly Population

Hannah Mowery

School of Social Work

Abstract:

This poster illustrates and explains the importance and use of innovative interventions, specifically within the elderly community. The poster will include sections on a research study, as well as theories and policies that relate and support the topic. The research study identifies the importance of incorporating innovative interventions and the effects they have on various populations in clinical and therapeutic settings. The research design consists of a qualitative survey that completed by five current or retired music therapists. The survey consisted of 7 questions, including demographics and open-ended questions allowing the participant to share as little or as much as they felt comfortable and appropriate. The average amount of experience by the participants was 14.8 years. Those who practice, or have practiced, using innovative interventions through music therapy, believe it to be beneficial and it should be more common in practice than it currently is. Music therapy is a type of therapy that is not used enough, as stated by a participant in the research study. Clinical and therapeutic professionals can use the findings from this study to broaden their practice and explore more innovative techniques. Lastly, this study identifies implications that future studies and researchers can use to expand their knowledge on innovative interventions. Cognitive behavioral therapy, empowerment theory, family systems theory, the Older Americans Act, and the Act for Elder Justice support this topic.
Interdisciplinary Aspects of Case Management

Jenna Delk  
Wendy Downey  

School of Nursing

Abstract:

With the aging population and increasing co-morbidity, it is more important than ever before that healthcare provide a multi-faceted and integrated approach to achieving patient wellness. This scenario has led to the need for case managers to facilitate interprofessional collaboration among members of a multi-disciplinary team consisting of physicians, nurses, social workers, occupational therapists and/or physical therapists. While there is no set profession for this team leader role, most case managers are usually individuals who hold a Bachelor of Science in Nursing with possibly a certificate for case management or individuals with Bachelor of Arts/Master’s in Social Work who have not received formal medical training. These nurses and social workers have been working in the field for at least two to three years and have earned their leadership role through sheer hard work and on-the-job experience. There are a handful of programs specifically designed for case management as a Master of Science in Nursing specialty. However, bachelor’s programs focus broadly on specialties other than case management and few programs provide any training in the interprofessional education that is needed for nursing practice, much more specifically for case management. The Joint Commission has stated that the leading cause of patient and system errors is poor communication among healthcare professionals (TJC, 2012). Therefore, certain aspects of interprofessional education should be included in all health professional training to instill proper communication throughout healthcare.

Simulations between nursing students and medical residents or other healthcare professionals have been conducted to determine their value as training to overcome barriers and create open communication between health professions and have shown to improve students’ attitudes toward interprofessional communication, respect for other professions, and the importance of teamwork (Wilcox et al, 2017. Castello et al, 2017.) Until there is curriculum designed specifically to train nursing students to become case managers, even as an elective, programs may consider these simulations in order to better prepare all students to work better with other healthcare disciplines.
*Managing Phantom Limb Pain in Individuals with Amputations: TENS and Mirror Therapy*

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Department of Occupational Therapy

**Abstract:**

Individuals who receive amputations often experience phantom limb pain (PLP). Mirror therapy and transcutaneous electrical nerve stimulation (TENS) are two interventions that can be used to treat PLP. To better understand how effective these two treatments are, databases such as MEDLINE, CINAHL, and ProQuest were searched to locate studies relevant to both interventions. A total of 20 articles were reviewed and 8 articles were chosen to be included in the evidence synthesis. The articles that were chosen investigated these treatments in relation to PLP with no restrictions placed on gender, age, reason for amputation, or level of amputation. After completing the literature review, it was concluded that mirror therapy and TENS are both considered to be effective treatments for PLP. The evidence indicated significant pain reduction or total alleviation of pain using either mirror therapy or TENS. However, no study included in the synthesis could confirm that one treatment method is more effective than the other.

The evidence evaluated supports the use of mirror therapy and TENS for the treatment of PLP, but does not support that one treatment is more successful than the other. More research should be conducted to see whether one method of treatment is more effective than the other. It is within an occupational therapist’s scope of practice to provide these treatment options to clients since evidence supports these intervention methods. Although several limitations throughout the body of evidence show the need for further research, these interventions should be implemented more often in the field of occupational therapy. The use of mirror therapy or TENS could give occupational therapists the ability to treat clients with amputations and PLP while supporting them in their desired occupations such as work, leisure, and rest and sleep.
*Open Educational Resources in Research Methods Education: A Pilot Study*

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Amanda Parsons  
David Cacamis  

*School of Social Work*  

**Abstract:**

Open educational resources (OER) include textbooks, activities, and other instructional materials that are used to deliver and enhance learning. OER differs from traditional learning resources in important ways. They are usually free to access and use creative commons copyright licenses that enable educators to retain, reuse, revise, remix, and redistribute content. Empirical studies of OER demonstrate improvements in student learning outcomes, equivalent or superior perceptions of quality, higher satisfaction and retention, and greater accessibility.

The two more salient benefits of OER are reducing costs for students and lowering barriers to collaboration for faculty. Textbook costs are increasing at a faster rate than tuition, housing, and other student costs. Moreover, a comprehensive study of the Florida university system found 64% of students do not purchase a textbook due to cost, and close to half of all students did not register for courses, registered for fewer courses, and received lower grades due to textbook costs. While addressing skyrocketing textbook costs, OER also provides an intellectual and legal framework for formal, multi-site collaboration and publication of instructional materials. Professors often borrow learning resources from colleagues to enhance their teaching. Over time, a network of OER-engaged scholars can create textbooks, resource, and courses that reflect the work of a community, connecting professors who previously labored in relative isolation.

For these reasons, the PI adapted an open textbook for undergraduate research methods originally written for sociology students and conducted a mixed-methods, quasi-experiment using undergraduate social work students. The proposed poster session will review the lessons learned from adapting an open textbook, best practices for adapting OER, and the results of the pilot study. Participants will be provided with paper copies and weblinks to the OER materials developed in the study and are encouraged to ask questions about adapting and adopting OER within their discipline.
Parent Education Level Influences Childhood Obesity Outcomes

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Mark Ohene  
Katelyn Wampler  

School of Nursing

Abstract:

The purpose of this paper is to evaluate parental influence on childhood obesity through eating habits, activity level, and educational level of the parents on the management of childhood obesity. Literature searches were conducted using relevant keywords: parenting, education, pediatric obesity; childhood, obesity, parental, education using McConnell Library’s SuperSearch tool, limiting articles to academic journals published since 2012. Four articles were selected from 3,412 and 5,169 results. The retained research articles showed there was no standard intervention for childhood obesity, although the National Institutes of Health recommends the basic guideline of eating right, getting active, and reducing screen time (About We can!?, 2014). Parental education is recognized as the primary setting for effecting change and decreasing the prevalence of obesity in children. The research question is aimed at addressing just the educational level aspect of this problem. The hypothesis is if the parents have decreased education levels and decreased access to education then the rate of obesity for those children will increase. A parent’s educational level is correlated to the risk of obesity in the child, especially for boys. Families identify mutual support as helping them change family eating and exercise habits. They also see barriers to change in parents, work hours, children’s and adolescent’s schedules, and having too many obligations. Obesity interventions can be aimed at parents and children or parents alone. Parental education can be delivered by many people with influence, including daycare and healthcare providers.

Keywords: Obesity, eating habits, activity level, parents’ education.
Parental Substance Use and Mental Health Implications in Children

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School of Social Work

Abstract:

Drug dependence can affect an adult’s environment and those around them in many negative ways consisting of problems related to various dangerous and unhealthy factors. These negative effects can become ever more dangerous as a child is brought into the environment. The connection between these two vulnerable populations will be integrated to investigate how the child’s mental health is negatively affected by a parent’s drug and alcohol abuse. Attachment, social learning and psychosocial theories will be used to as a theoretical lens looking at the policies and practices among the subject matter. A qualitative research design was performed and themes were identified between parental substance use and implications on the child’s mental health. This study was completed by looking at personal accounts of children who experienced this growing up in a household with parents who chose to cope with daily life by using alcohol and drugs. The Children’s Health Insurance Program and family drug court program will be reviewed as important policies facing both populations. Practice implications in the clinical setting for working with these populations will also be addressed as family-centered therapy will be reviewed and evaluated as an approach in working with both populations.
Pre-season Subjective Factors and Performance on the King-Devick Test

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Loren Favale  
Ashley Kopso  
Bryan Leake  

Department of Physical Therapy

Abstract:

Purpose: The purpose of this study was to determine if pre-season variables including neck pain, headache, dizziness, and history of concussion worsen King-Devick (K-D) scores, predisposing an athlete for further injury.

Subjects: 21 female high school varsity soccer athletes, mean age of 15 years (±1.2) and mean BMI of 20 (±2.4).

Methods: A prospective cohort study. Prior to the start of the season, athletes completed a questionnaire to obtain data regarding if an athlete had symptoms of headache, dizziness, neck pain, or a history of concussion. Subjects were also assessed during the pre-season using the K-D test.

Results: The current study determined that in the presence of at least two out of four pre-season measures (history of concussion, presence of headache, dizziness, and neck pain), K-D scores were 4.27 seconds slower than athletes without any history of these measures (46.15 ± 10.99 seconds versus 41.88 ± 3.79 seconds).

Conclusions: Athletes with any combination of two out of the four subjective factors, scored worse on the K-D test. This finding is not statistically significant, but may still warrant the screening of specific athletes in order to determine system deficits, including visual, vestibular, and somatosensory. Increased time on the K-D test may indicate oculomotor or cognitive impairments that may predispose an athlete to an increased risk for injury.

Clinical Relevance: Concussion injury involves multiple systems making it difficult to predict those at risk of experiencing another concussion and/or a musculoskeletal injury. The findings from this current study may indicate a possible trend regarding athletes with pre-season measures and risk for injury. Further well controlled studies need to be conducted with larger sample sizes.
Rapid Response Teams

Nina Boelte  
Abigail Clark  
Delanie Cook  

School of Nursing

Abstract:

In this nursing research study, several articles were analyzed to determine how the implementation of Rapid Response Teams affected patient outcomes. The studies analyzed were conducted within the last five years. The literature provided similar data with each study conducted, with some variability. The implementation of Rapid Response Teams did not impact mortality rates directly, but showed no evidence of increased mortality rates. Overall, their presence improved the staff work environment as well as relationships among the staff members.
Recidivism Among Juvenile Offenders

Summer Norton

School of Social Work

Abstract:

Research suggests that many variables can impact the probability of recidivism within young people, some creating higher re-offense rates, others significantly decreasing re-offense rates. This study attempts to examine youth recidivism using a social work lens in order to determine best practices for reducing the recidivism cycle. More specifically, this study uses symbolic interaction, psychoanalytic and ecological systems theories to address the high youth recidivism rates in America, while looking more intricately at Virginia. Policy, diversity and ethical issues surrounding this vulnerable population are also addressed.
Reduction in Post-Traumatic Stress Symptoms by Implementing Complementary Therapies

Caroline Bright  
Ashley Irwin  
Kathleen Orrick  
Catherine Tharp  

School of Nursing  
School of Nursing  
School of Nursing  
School of Nursing

Abstract:

This research project was conducted to determine if using the complementary therapy with post-traumatic stress disorder patients would reduce their symptoms other than using the current practices. The researchers specifically looked at the beneficial effects of complementary therapies such as outdoor recreation, yoga, service dogs, and art therapy used with veterans with post-traumatic stress disorder, adults with post-traumatic stress disorder from childhood sexual abuse, and a group of women over the age of 18 with post-traumatic stress disorder. Literature searches were conducted to find significant findings that applied to our clinical question. It was found that complementary therapies such as the use of trauma sensitive yoga in female participants over age 18, art therapy with adults that suffered abuse from childhood, dog therapy with veterans as well as outdoor recreation intervention involving fly-fishing with veterans were all shown to be effective in reducing the psychological symptoms. Clinical practice should be continued with psychotherapy and pharmaceutical agents to treat post-traumatic stress disorder, as supplemented by complimentary alternative therapies, especially when patients are unresponsive to treatment by traditional therapies. This will help in holistic treatment and proper recognition of the patient an individual.
Relationship between Housing and Psychiatric Hospitalization Among Individuals with Intellectual or Developmental Disabilities

Victoria Mesner

School of Social Work

Abstract:

This poster will evaluate the relationship between type of housing and number of psychiatric hospitalizations in those with developmental disabilities. The paper will review existing literature on the behaviors of individuals with developmental disabilities and how this can cause psychiatric hospitalizations. Type of housing supports will also be looked at historically and how supportive housing interventions can prevent psychiatric hospitalizations. The Medicaid waiver redesign and the different types of housing an individual with DD can receive will be discussed and evaluated. This paper will also investigate how policies since the 1990s have impacted the services and housing available to individuals with developmental disabilities. Theories such as contingency theory will be utilized to look at how those in power have provided resources and services and how they are distributed. Social learning theory and empowerment theory will utilize a micro lens to assess how individuals with DD develop therapeutic alliances with staff and how this can assist in behavior stabilization. Finally, the paper will then look at how previous literature, current and past policies, and theories can improve the services and practice social workers provide to individuals with developmental disabilities.
Return to Work Experience of Adults Following a Traumatic Brain Injury

Katelynne Sims

Department of Occupational Therapy

Abstract:

The aim of this evidence synthesis is to evaluate the research evidence on the return to work experience of adults following a traumatic brain injury. The specific clinical question to be answered is: What is the return to work experience of adults following a traumatic brain injury? Based on a Medline, OT search, and CINAHL database search, 83 phenomenological studies were located, with 35 reviewed for (a) current traumatic brain injury history and (b) the return to work experience of adults. From the 35 studies, 10 studies were selected for inclusion and analyzed for how occupational therapy could play a role. The analysis of the return to work experience of adults following a traumatic brain injury revealed that each participant manages tasks differently than prior to the injury. From the verbalization of the participants on their experiences, four categories emerged addressing the common experiences adults face when returning to work. The categories are as followed: Symptoms, return to work difficulties, role of work in one’s life, and employer and co-worker support. The categories embrace the diverse perspectives from each participant on the different skills and adaptations made not only in the work place, but also at home. Adults who return to work following a traumatic brain injury experience a long and hard process that is often accompanied by the stigmatization of discrimination and harassment. To prevent such stigmatization, the process requires a motivated individual, flexible work, accommodating employers, and employer and co-worker support. The participants’ experience on returning to work following a traumatic brain injury, provides important information for occupational therapists working with individuals who want to return to work following a traumatic brain injury. These experiences enable occupational therapists to provide education and intervention strategies on the difficulties adults who return to work following a traumatic brain injury encounter.
Robotic Surgery: Prostatectomy Surgical Approach Comparison

Vickie Taylor  
School of Nursing

Abstract:

Objective: The purpose of the study was to evaluate the overall immediate patient outcomes and costs of two different surgical modalities for prostatectomy (RARP and ORP).

Methods: A retrospective observational two-comparison study is designed in 59 male patients who underwent either an RARP or ORP to evaluate and compare the patient outcomes during the first year of inception of the robotic-assisted program.

Results: When compared, the mean surgical room time was longer for RARP (2.90 hours +/- .49) compared with ORP (2.27 hours +/- .36, p = .000). The mean surgical procedural time was longer for RARP (2.24 hours +/- .42) compared with ORP (1.31 hours +/- .38, p = .000). The mean estimated blood loss for RARP (145.14 mL +/- 67.83) compared with ORP (219.05 mL +/- 301.45) was less with one outlier data point of 1400mL reported for an open radical prostatectomy with lymph node dissection. The cost endpoints of comparison were statically significant as well with the mean direct procedural cost reported as greater for RARP ($3038.69 +/- 399.04) compared with ORP ($834.33 +/- 51.51, p = .000). The overall hospital direct cost mean was greater for RARP ($6777.69 +/- 993.14) than ORP ($5070.44 +/- 590.30, p = .000). However, the postoperative costs were significantly less in the RARP ($3,739 +/- 780.88) compared with ORP ($4,236 +/- 579.77). None of the immediate postoperative patient outcomes were found to be significant including recovery room length of stay, transfusion rates, and overall complication rate between the two surgical modalities. The postoperative pain scores were not significantly different except for the first pain score assessed upon arrival to the surgical floor, which found the RARP to be significantly less.

Conclusions: A new robotic program presents a safe opportunity for community hospitals to expand their services while achieving equivocal patient outcomes compared to the ORP and literature findings. If the majority of ORP procedures are the perineal approach, the new program may not experience the advantages found in the literature such as EBL and transfusion rates, which is primarily compared to the open abdominal approach.
Rural Community Centers: Engagement and Social Benefits

Terra Alagna-Cole

School of Social Work

Abstract:

The human need for companionship and support from others is undeniable. Examining how this companionship and support correlates to increased physical and emotional wellbeing is discussed within this paper as well as a study conducted by this author that explored the opinions of residents in a small rural county in Virginia concerning a community center. It investigates what residents desire from a community center and whether they feel that a project such as creating a community center would be utilized and sustainable. Floyd is a rural county in Southwest Virginia that currently does not have a community center as well as having a lack of resources for children while they are not in school as well as for elders. Due to Floyd’s location, there is also a serious opioid and methamphetamine epidemic that has begun to be addressed; however, Floyd is still in the grips of this national epidemic. The data collected for the research section of this paper was through a survey for all Floyd residents and a focus group. A total of 80 residents provided their opinions on whether a community center would be beneficial to the county as well as what the center should provide. The frequency tests of the data showed that many of the residents desired a community center and access to certain activities. How other community centers have increased overall wellbeing are noted in this paper; as well as how social workers can incorporate social work theories and practice into a center to provide enrichment and culture to residents that may not obtain these in any other way. In social work, professionals need to be aware of the constrictions that come with rural areas and how the geographical limitations and poverty can hinder residents' ability to obtain the companionship and support of others.
Societal Effects on Body Image Among Aging Women

Danielle Bell  
*School of Social Work*

**Abstract:**

Through a social work perspective this integrative paper explores body image issues among women as they age. In a world full of plastic surgeries and photo enhanced fashion models this study collects a variety of on-line blog posts regarding women's depictions of their experiences with body image. Each blog includes data from four different types of webpages with titles including: The Body Image Project, Body Bliss Central, Imperfect Women, and Flourish over Fifty. Feminist, Narrative, Psychosocial, and Empowerment theories are used to provide insight into this topic to gain more knowledge for social work practice. This study analyses the results, methodology, and a systematic literature review in order to provide a better understanding of the current information on this extensive topic. Furthermore, this information would be helpful in social work practice involving women struggling with depression or other mental health challenges. Along with policy and other forms of research, the information would help men and women understand how body image can be positively or negatively affected by societal views. Using this information in social work practice would help provide a better understanding on how women view their body image as they age.
The Cost of Caregiving for a Loved On

Dana Diamond  
*School of Social Work*

**Abstract:**

This research examines caregivers in the New River Valley and the stress they endure due to being a caregiver to a loved one. It focuses on how the levels of stress differ based on the relationship between the caregiver and recipient. Specifically, the problem is lack of community resources and advocacy for this population. While this research focuses on caregivers and care recipients of all ages it differs from the research out there because it compares the various relationships. This area is important to the field of social work because the number of caregivers has greatly risen due to the increasing elderly population, which has caused for a greater need to understand the implications of caregivers.
The Effect of Physical Activity on Pain and Social Interaction in Persons with Cerebral Palsy

Lauren Boush
Department of Sports Medicine

Abstract:

Purpose: Cerebral Palsy is a disorder that can affect an individual's movement and posture, which can lead to lower levels of physical activity (PA), an increase in pain level, and inhibition to social interaction. Although many interventions have been conducted in this population examining improvement in physical fitness and function, there is less research that investigates the benefits of exercise on affective variables and behavior. Therefore, the purpose of this study was to examine how a PA intervention affects PA and pain level in persons with Cerebral Palsy.

Methods: Participants participated in a 4-week PA intervention twice a week, which included the following exercise equipment: resistance loop, 3lb kettle bell, fitness step, and stability ball. Amount of daily steps, daily pain level, and time at different intensities were collected from the participants on two occasions during the 2-week pre- and post-test sessions. Daily steps were recorded via pedometers. Pain level was measured with the Comparative Pain Scale. Time at different intensities were recorded through the Physical Activity Scale for Individuals with Physical Disabilities. IRB approval and participant consent was obtained prior to the study.

Results: From pre- to post-test there was an increase (426%) in the participants’ amount of daily steps from pre- to post-test, a decrease in pain scale score (-66%), a decrease in sedentary activity time (-61%), and increase in light exercise (92%), moderate exercise (138%), strenuous exercise (100%), muscular strength exercise (99%), and working/volunteering (23%) time.

Conclusion: Results indicated that a 4-week PA intervention in persons with CP can increase the time spent exercising and decrease pain level. This conclusion is supported by the higher percentage increase in the number of sets and reps each individual executed in their biweekly exercise sessions.
The Effect That Furthering Education Has on Cultural Competency

Oliver Benitez  
*School of Social Work*

**Abstract:**

This poster discusses the importance of cultural competency, and how being culturally competent can impact people. Being culturally competent can help people better understand, and work better with others. The current research looked at previous studies, and what has been found about the impact of cultural competency training on those in the health care field. The focus of the poster was to look at the difference between cultural competency levels of those who have received a college education in general, and those who have not. Twenty-nine participants took a cross sectional survey (Iowa Cultural Understanding Assessment), to measure levels of cultural competency. Fourteen of the participants were males (48.3%), while 15 were females (51.7%). There were no statistically significant findings regarding participant’s levels of education. However, the results showed that female participants received lower scores (higher levels of cultural competency) than the male participants.
The Effectiveness of Task-Oriented Training on ADL performance in Clients Post-stroke.

Evan Cassell  
Department of Occupational Therapy

Abstract:
Stroke is a prevalent diagnosis among Americans, commonly treated by occupational therapists. There are roughly three million stroke survivors in this country, most of which experience functional disability (Krug & McCormack, 2009). Stroke often results in hemiplegia; paralysis on one side of the body with an associated decrease of function of the upper and lower extremities on the affected side. Because of the severity of symptoms of hemiplegia, people who are diagnosed with stroke have difficulty performing activities of daily living (ADLs) and lose independence in their daily lives. Task-oriented interventions might initially be centered around improving ADLs such as bathing, toileting, dressing, swallowing, feeding, functional mobility, personal device care, and personal hygiene, and later focusing on instrumental activities of daily living such as food preparation and community mobility (Izumi & Takeuchi, 2013). A goal of TOT intervention is to promote independence in ADLs among people with stroke by restoring function in cognition, strength, and range of motion. These interventions typically take place in a skilled nursing facility, inpatient or outpatient rehabilitation center, and within a client’s home (Pollock et al., 2014). This paper aims to appraise the evidence on the effectiveness of TOT interventions on upper extremity function for ADL performance in persons with stroke. The specific question to be answered is: What is the effectiveness of task-oriented training on improving upper extremity (UE) function for ADL performance in adults with stroke?
*The Effects of Attention When Assessing People with Aphasia*

Kate Reedy  
Hyejin Park  

*Department of Communication Sciences and Disorders*

**Abstract:**

Aphasia is a language disorder most commonly caused by a cerebrovascular accident or brain injury. However, people with aphasia often have comorbid cognitive problems such as attention deficits. When assessing individuals, it is important to differentiate attention deficits from language deficits in order to ensure accurate assessment. The purpose of this literature review is to address the aspects and image characteristics that affect attention allocation and how that may affect the indexing of the linguistic abilities of individuals with aphasia.

Heuer & Hallowell (2007) presented multiple-choice image questions from an aphasia battery to healthy young adults and followed their eye movements. They found that attention allocation is affected by color, orientation, and the degree of imageability of images. For example, colored items attract longer attention than black and white items. If one item has a different orientation than other items within a set, that can cause disproportionate attention allocation (Heuer & Hallowell, 2007). Highly imageable items (items that are easily evoked as mental images, e.g., dog) also drew longer attention than less imageable items (e.g., happiness). If these characteristics cause neurotypicals to have difficulty allocating attention, it can be assumed that attention allocation in people with aphasia will be affected by these factors. To support this assumption, Heuer, Ivanova, and Hallowell (2017) created multiple-choice questions with four images and manipulated a characteristic (orientation, color, luminance, or size) in one of the images. Each question was presented to individuals with aphasia. Participants looked at the altered image more often than the other three images with or without verbal instruction to look at an unaltered image. This exemplifies the notion that visual characteristics significantly affect attention allocation in individuals with aphasia. Therefore, to avoid inaccurate indexing of language abilities, speech-language pathologists should be aware of these cognitive complications.
*The Effects Of Exertion On the King-Devick score in Adult Male Wheelchair Athletes: A Pilot Study

Angela Mickle  
Rachel Clarkson  
J.P. Barfield  

Department of Health and Human Performance

Abstract:

Context: The King-Devick (KD) is a rapid eye movement test assessment given on a computer tablet, which can be used as a sideline screening method for concussions. This has not been studied on wheelchair athletes. Researchers administered the King-Devick concussion assessment tool to all participants to establish the effects of exertion on the athletes baseline score.

Setting: The participants were each given the KD in a quiet setting from an eye-level situated iPad. The iPad was positioned on a music stand. Following the baseline assessment, participants did a general 5-10 minute warm up consisting of light pushing, followed by 2 sprints at 50% followed by 30 seconds rest. Then 2 sprints at 75% were done with 30 seconds rest, and lastly, 2 sprints were done at 100% for half the distance, followed by 1 of minute rest. After the exercise was completed participants were given a perceived exertion scale where they rated overall how hard the sprints they completed were. Immediately after researchers administered a second King-Devick test.

Patients or Other Participants: 7 male athletes playing in a wheelchair basketball league during the offseason.

Main Outcome Measures: The effects of exertion on the K-D score. Results. King-Devick scores improved after exertion.

Conclusion: Participants overall speed when taking the King-Devick after intense physical exertion decreased. These results are similar to what other studies have found looking at the effects of exertion on non-wheel chair athlete’s KD scores.
The Effects of Marijuana on a Fetus During Pregnancy

Emma Burch  
Brooke Hutchison  
Woods Tanner  
Gabrielle Woods

Abstract:

Marijuana is one of the most used drugs in the world, and it is the most illicit drug used during pregnancy. In society today, health professionals strongly advise pregnant women to not use marijuana during the course of their pregnancy due to the effects on the fetus, however, many women still do use marijuana during their pregnancy. Based on research, this paper describes whether marijuana negatively affects the fetus during pregnancy, or if it has no effect on the fetus at all. From the research that was used to gather information on this topic, there were mixed results as to whether or not marijuana use was safe for pregnant women and their fetus during pregnancy. This research paper further discusses both the negative effects on the fetus and having no effect on the fetus.
Abstract:

The purpose of this study was to determine the effects of individualized exercise and manual therapy provided pre-surgery (prehabilitation) on outcomes following Total Knee Arthroplasty (TKA). Osteoarthritis (OA) is a leading cause of disability in the US, with knee OA causing more functional limitations than any other OA location of the body. A widely accepted solution for treating severe end-stage knee OA is undergoing a total knee arthroplasty (TKA). By 2030, total knee replacement operations are expected to reach 3.5 million procedures per year to accommodate the nearly fifty percent of all Americans who will develop knee OA in their lifetime.

The greatest improvements following TKA occur in the first twelve weeks post-surgery, driving clinicians to determine what can be done to increase the efficiency of postoperative recovery. Higher preoperative self-report and physical performance measures are correlated with faster improvements in these measures post TKA, clinicians may consider the benefits of prehabilitation to improve these scores. Prior research has not demonstrated the effectiveness of prehabilitation for improving TKA outcomes, possibly due to limitations created by intervention design, location and the clinician leading the program.

A prospective randomized control design was used to compare six-weeks of prehabilitation programming effects at four time points: pre-intervention, one week pre-surgery, and one and three months post-surgery. Preliminary results support the hypothesis that a preoperative, patient-specific physical therapy program may improve postoperative self-reported and physical performance outcomes after TKA.

*References available upon request*
The Effects of Prison-based Animal Programs (PAPs) on Recidivism Rates

Liz Ritchie

Abstract:
This paper seeks to look at the effects that prison-based animal programs (PAPs) have on recidivism rates, behavioral changes, and skill building. To begin with, a brief history of animal-assisted interventions is provided as well as a further look into the unique human-animal bond that has inspired the use animals in various settings. By using the perspective of attachment theory, this paper takes into account how animals can fulfill the attachment model for individuals. Desistance theory is applied to look at how criminal behavior ceases. Lastly, social exchange theory will be applied at a macro level perspective. The research conducted for this analysis consisted of qualitative interviews with eleven facilitators, directors, or vice presidents of PAPs in various parts of the United States. These programs included canine training, service dog training, feline care and foster, and equine grooming and horsemanship. The research results of this study provided twelve common themes that were identified in the set of interviews. Among the set of interviews, some facilitators were able to provide recidivism rates while other facilitators were able to provide anecdotal reports regarding recidivism rates. Lastly, this integrative paper looks at what policies are already in place that relate to the utilization of PAPS and further implications such as the needs of evidence-based research for animal-assisted interventions.
The Effects of Societal Stigma on Individuals with Disabilities

Katla Figgatt  
School of Social Work

Abstract:
This poster aims to bring awareness to society's negative social stigma and the how it affects individuals who have a disability. This poster will show the way that perceived stigma influences anxiety and depression in those that have a physical disability and explore the policies that currently affect those individuals in their life and through legislation currently in place. These individuals often experience higher anxiety and depression due to this stigma which deters them from participation in public activities. Often, this is due to the stigma from society and results in higher anxiety and depression. The research study identifies the negative effects that society stigma has on individuals and the decrease that it has on their participation in public activities. This research design consists of a qualitative study that consisted of fifteen open-ended questions. During this study it was found that over half of the participants had anxiety or depression resulting for societal stigma and all participants had been excluded from some type of public activity. Lastly, this poster will identify ways to help combat high anxiety and depression rates in individuals who have a disability and bring awareness to lower these rates.
The Effects of Trauma on Education

Emma Elliott

Abstract:

The purpose of this study is to examine the effects that childhood trauma plays on education in elementary aged children, and in response, what resources should be put in place to address these outcomes. This study aims to identify the challenges that mental health professionals and educators face when working with children who have a history of trauma that impacts their daily functioning. This study also aims to identify what strategies that are currently in place are perceived to be working, or not working, and what new strategies participants would like to see implemented to address these concerns.
The Impact of Barriers on the Physical Activity Levels of Children with Autism Spectrum Disorder

Michele Kindy

School of Social Work

Abstract:

This study proposes to examine the barriers that children with Autism Spectrum Disorder (ASD) face when engaging in physical activity. The concept of physical activity is complex for this specific population, in that many barriers limit one's ability to access. This study intends to identify such barriers, so that one's access to physical activity is better understood. Existing barriers include mental, physical, emotional, environmental, and societal factors. Changes need to be made at all levels, to decrease the number of overweight and obese children with ASD. Results gathered through surveys distributed to parents of children with ASD will provide vast insight into why such barriers exist. This will help us to further understand ways to combat these barriers. In turn, their parents will gain an awareness into the challenges that their children face. Within Virginia, the Code of Virginia requires all local schools to offer physical fitness to their students. However, private schools do not fall under these same guidelines. However, the American with Disabilities Act protects the rights and opportunities for those with disabilities. In following such guidelines, communities need to come together to implement just and effective practice. Community-based practice and efforts made by all involved are vital to the health of children with ASD. That being said, the utilization of ecological systems theory applies to the issue at hand on the macro level. In looking at children with ASD on the micro level, their interpretation of the behavior of others would need to be identified through the lens of symbolic interactionism. On an even more micro level, coherence theory looks at the way in which children with ASD understand context they are presented with. All theories listed would need to be considered when implementing new programs for children with ASD within their communities.
The Impact of Medication-Assisted Treatment on Social Behaviors of Persons with PTSD and SUD

Stormie Saunders

School of Social Work

Abstract:

Medication-assisted treatment (MAT) is controversial due to the stigmatization of "trading one drug for another." Self-medicating, an addictive-like behavior, is higher and riskier of persons dually diagnosed with SUD and mental illnesses. Misuse of substances is often rationalized due to medication exposure from medical practitioners. MAT is important to Social Work due to the high comorbidity between substance use and other mental health disorders. The purpose of this research is to discover that medication-assisted treatment (MAT) is beneficial to social functioning and overall quality of life. Social Learning Theory will be explored to assess social behaviors throughout the treatment process. From the macro level, Social Construction Theory will also be explored in this research to validate the sociocultural and historical backgrounds affected by PTSD and SUD. Rational Choice Theory will also be explored to assess self-motivation as a part of treatment and recovery. The Comprehensive Addiction and Recovery Act (CARA) and Mental Health and Addiction Treatment Expansion Act (S. 1905/H.R. 3931) will be applied as a part of social work policies. Prolonged Exposure (PE) therapy and Supportive counseling are discussed in depth as a part of Social Work practice for mental health and substance abuse treatment.
Abstract:

Code switching is defined as an alteration of words and phrases between two languages or dialects (Roth & Worthington, 2016). Research has shown that code-switching has become a topic of debate regarding its impact in academic contexts, especially in regards to student’s language use and learning (Adger, Christian, & Taylor, 1999; Gatlin & Wanzek, 2015). In recent years, speech language pathologists’ (SLP) role in addressing the needs of culturally and linguistically diverse populations has drastically increased. While there has been extensive research about perceptions, and use of code-switching between languages and dialects, such as Spanish, Chinese, African American English and Chicano English, there have been very few studies evaluating the unique qualities and needs of Native Americans. This population is unique due to the value of cultural maintenance. Specifically, increasing numbers of Native American children enter school with English as their primary language. However, at the same time, community languages continue to be a part of linguistic ecologies, which typically include one or more tribal languages and Nativised varieties of English (McCarty, Romero-Little, & Zepeda, 2006). Therefore, the purpose of this study is to examine the factors leading American Indians to code-switch, including the importance of language maintenance, and how doing so may have inherently affected their academic success. Data will be gathered via the use of an online Qualtrics survey that will be distributed to members of both state and federally recognized American Indian Tribes. By analyzing these participants’ past experiences and motivations, we hope to garner essential knowledge in regards to how SLPs should serve Native clients in the future. Results of this survey could provide first-hand considerations for the future development of culturally-competent assessment and treatment by SLPs as well as steps that can be taken to foster an academic environment that values code-switching.
The Relationship between Underage Binge Drinking and Sexual Activity under the Influence of Alcohol

Joseph Tyler Vance  
*School of Social Work*

**Abstract:**

The purpose of this research is to explore archival anonymous youth survey data from a Southwest Virginia high school to examine the relationship between underage drinking and sexual activity under the influence of alcohol. Social cognitive theory, ecological systems theory, and feminist theory have been used in this research. The actual work was doing using archival data on SPSS. A chi-square test was used to determine if there was a relationship between the new created variables of risky sexual behavior and risky drinking. The results from the chi-square test support the hypothesis that there is a relationship between risky sexual behavior and risky drinking behavior. The implications of this study are mostly on local level policies that influence substance abuse and violence prevention education.
*The Supportive Community Program for Aging in Place: A Case Study of Supportive Services in Eilat, Israel*

Etty Vandsburger

*School of Social Work*

**Abstract:**

Supportive communities are described as age-prepared communities or elder-friendly communities (Alley, Liebig, Pynoos, Banerjee, & Choi, 2007). They are defined as places that actively involve, value, and support older adults, both active and frail, with infrastructure and services that effectively accommodate their changing needs (Alley et.al, 2007, p.1). The purpose of this case study was to explore structure and applications of the Supportive Community Program model as applied in the rural city of Eilat, Israel. An additional purpose of this case study was to explore the benefits and challenges that this program faces when providing services for the older adult population. This case study specifically focused on this rural region because of its remoteness from urban locations where concentration of services is more readily available. Results of this study contribute to enriching our knowledge on supportive community models for aging in place.
The Treatment of Neonatal Abstinence Syndrome

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Gayle Stockes  
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Abstract:

This study addresses the efficacy of inpatient and outpatient treatment regarding Neonatal Abstinence Syndrome (NAS) within the United States and Australia. The efficacy of NAS treatment is important because the incidence of newborn opioid addiction is rising at an alarming rate globally. The effectiveness of treatment is difficult to address due to the fact that outpatient treatment for NAS is not readily reported, and little research has been done. Other difficulties include patient/parent compliance with medication administration, scheduled appointments, and supervision. The approaches covered in this review include chart review, and strict criteria for acceptance into the study. Those criteria include certain insurance policies, social work reviews, gestational age, and being part of an antenatal outpatient treatment program. Solutions to the difficulties of these programs included regular at home visits by RNs, along with prefilled syringes by pharmacies. It was found that cost was reduced when outpatient treatment was used, the average length of hospital stay was decreased with outpatient treatment, the incidence of breastfeeding increased, and maternal-infant attachment was improved with outpatient treatment. Regarding worries of medication administration, scheduled appointments, and supervision, only two infants were readmitted to the hospital within the first year of life, and only two infants were administered a medication error.
Transitions in Care: An Interprofessional Effort at Public Education on Insurance Status

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School of Nursing  
School of Social Work  
Department of Occupational Therapy  
Department of Occupational Therapy

Abstract:

Our interprofessional team, comprised of graduate-level students from Nursing, Social Work, and Occupational Therapy, came to the realization that the clients at the Free Clinic of Pulaski (FCP) who become eligible for health insurance are often left unsure of their next steps. Many individuals in this situation have trouble understanding what having insurance means. As a service project, our team decided to formulate patient-centered, low-literacy, educational handouts on insurance types for FCP clients.

Each team member has different backgrounds, some with experience working with the uninsured and some with no experience. Each person within the group brought their own set of knowledge and skills and worked together as a team to incorporate everyone’s unique skill set into the project. We each shared our knowledge of how gaining insurance could potentially result in disruptions in a patient’s healthcare.

As previously stated each brochure is tailored to a low-literacy level audience. Utilizing Microsoft Word’s literacy evaluation tool, the reading literacy levels of all materials are set to a fifth-grade level. Health literacy is the degree to which individuals comprehend one’s health conditions, medications, and plan of care. According to Kickbusch (2001), health literacy includes having skills such as reading and understanding healthcare information, written and verbal information given by medical staff, and follow directions for appointments and procedures.

The development of this project helped each of our team members better understand the four core interprofessional education concepts of values and ethics, roles and responsibilities, communication, and teamwork. The entire endeavor was client-centered, required us to communicate frequently, function as a team, and show respect for one another as professionals with varying backgrounds and skill sets. The team gained practical experience in negotiation and conflict resolution, as well as experience in creating literacy-appropriate teaching materials for disadvantaged individuals.

References
https://doi.org/10.1093/heapro/16.3.289
Trauma Informed Care in Adolescent Residential Treatment

David Dacamis

School of Social Work

Abstract:

Adolescents receiving mental health services in residential facilities have a high likelihood of having experienced traumatic events in their life, which have led to emotional and behavioral issues. On top of special considerations for those with trauma, the way treatment is approached with this population at times requires different considerations due to the environment. At times the way these facilities approach treatment of this population is not conducive to addressing clients’ trauma and producing desired treatment outcomes. Trauma-informed care is an approach that sets the tone of trauma treatment that translates across settings and establishes core principles of working with individuals who are dealing with emotional trauma. Choice theory, attachment theory, and social construction theory will be use to explain the needs of this population and how trauma-informed care can address those needs. Policy impacting trauma informed care, practice implications, and social work values and ethics will also be explored. The purpose of this project is to discuss the importance of trauma informed care in residential treatment facilities for adolescents. Traumatized youth are overrepresented in residential treatment populations and their trauma may go unaddressed or unrecognized in those settings. Raising awareness will support policies reflecting best practices and hopefully lead to better treatment outcomes for clients and their families.
Virtual Reality-Based Training on Upper Body Movement and Activities of Daily Life in Older Adults with Parkinson’s Disease

Adanna Cheek  
Department of Health and Human Performance

Abstract:

Technology has allowed physical therapy to make leaps and bounds in the treatment of patients with Parkinson’s Disease (PD). This study’s purpose was to examine how virtual reality video games (VG), focused on the upper body, affected upper body mobility and activities of daily life in people with PD. To determine whether there was a change in upper body mobility and activities of daily life, the Arm Motor Ability Test (AMAT) was administered before and after 8 weeks of VG training. The participants trained on the Nintendo Wii Sports interactive video game (i.e., VG). The participants played 3 games that specifically focused on the use of their arms and upper torso: boxing, bowling, and golf. Results support the potential of VG training to improve upper body function in adults with PD.
Weighing the Risk of Readmission

Whitney Clements
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Abstract:

The purpose of this paper is to analyze the effectiveness of catered care plans in preventing the readmission of congestive heart failure patients. Through analysis of current practice, it was found that Carilion has set parameters for caring for congestive heart failure patients and preventing readmission within 30 days. We used SuperSearch with the key words: Congestive heart failure readmission. We set research parameters for the articles to be within the last five years (2012-2017), peer-reviewed articles, and academic journals. After setting parameters, we were able to choose from 1,370 articles. During literature review we found many articles describing the importance of catered care plans for congestive heart failure patients and the effectiveness found across the nation. Current literature outlined relevant risk factors, monetary burden on the hospital and government, and future complications effecting both the patient and the hospital. Unique discharge planning, extensive histories and physicals, and education with a multi-disciplinary mindset have all been proven effective in preventing readmission of congestive heart failure patients. Interventions in place to prevent readmission have been shown to be effective, however, more work needs to be done.

Keywords: congestive heart failure, readmission, interventions, discharge planning, prevention, care plan
International Experiences and Opportunities: Presentations

Presenter: Shala Cunningham PT, DPT, PhD  
Presentation: International clinical education opportunities for physical therapy students  
Description: This presentation will describe the current international clinical education opportunities for physical therapy students at Radford University including Italy, Belize and Kenya.

Presenter: Dr. Deneen Evans, PhD, MSW  
Presentation: Increasing minority student participation in study abroad programs  
Description: If international experiences are indeed becoming increasingly important to be competitive to potential employers, it is vital to examine the racial disparity in access and participation in study abroad programs. In the past five years, black students only accounted for five percent of all students studying abroad. Similarly, Hispanic and Asian students made up only six percent and eight percent, respectively, of students studying abroad. This presentation will describe methods used by the Radford University Master of Social Work program to increase participation of minority students in study abroad programs.

Presenters: Eunyoung Lee, PhD, FNP, ACNP/ANP, FAHA  
Cassidy McRorie, BSN Nursing Student  
Presentation: Comparative Healthcare System and Health Issues between Korea/Taiwan and the U.S. through Study Abroad  
Description: This presentation will describe a study abroad learning opportunity where students and faculty from the hosting and visiting country will visit their local community hospitals and clinics and observe health practices, and participate in didactics lectures and clinical practicum and the dynamic discussion to study the different health care system and its impact on health access and experience their cultures and analyze its impact on health behaviors and health issues.
International Experiences and Opportunities: Presentations continued

Presenters: Sarah Smidl, PhD, OTR/L
Rebecca Epperly, MS, CCC-SLP

Title: Interdisciplinary Service Learning in Jamaica
Description: This presentation will describe an annual interdisciplinary service learning opportunity between the OT and COSD departments where students and faculty provide teaching and training to therapy staff who work within the Mustard Seed Communities orphanage system in Jamaica.

Presenter: Sarah Smidl, PhD, OTR/L
Title: Post-Graduation International Volunteer Opportunities
Description: This presentation will describe post-graduation international volunteering opportunities for OTs, PTs, SLPs, and nurses with the non-profit organization, Therapy Missions. How to choose the right volunteer organization that meets your interests and needs will also be addressed.
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