

Spring 4-24-2014

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College of Health, Education, and Human Development
“The Engaged College with a Personal Touch”

Spring 2014

HEHD **CLEMSON**
RESEARCH
FORUM

April 24, 2014
1:30 pm – 3:00 pm
Hendrix Student Center

CLEMSON
U N I V E R S I T Y



WELCOME!

To all of our presenters and attendees, we express our *“thanks and appreciation.”* You contribute to the development of our college’s research presence. Your conversations and contributions will extend beyond today’s agenda to make a difference each day for our students, our colleagues, and our College.

The HEHD Research Forum is our entity for college-wide engagement in research activities. Our sharing of poster presentations celebrate and communicate the important work we do.

Kathy Headley

Associate Dean for Research and Graduate Studies

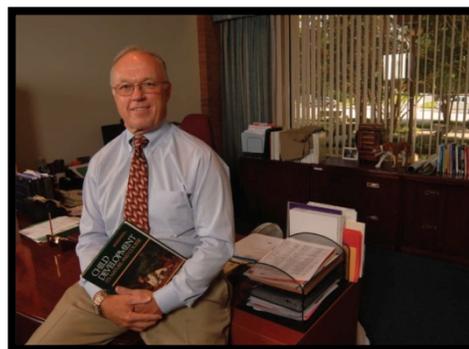
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MESSAGE FROM THE DEAN

Thank you for your participation in the College of Health, Education, and Human Development (HEHD) Research Forum. This is our opportunity to showcase the important work being done by all of you – faculty and students. Your creativity and innovation is on display for all to see and learn from; I appreciate your continued commitment to discovery and scholarship.



In this year of transition, I am very excited about the course we are charting for ourselves. We are reinventing ourselves with an eye toward the future, with a determination to not only address present but future societal issues. As we move forward we should be able to harness the intellectual power of all of you to address the vexing education, health, community, and environmental issues facing us today and tomorrow. The HEHD Research Forum is an important part of that effort.

In closing, let me thank each of you for your enthusiasm and motivation as we work together. Your contributions make a positive difference to our college, our university, and our state and nation.

Sincerely,

A handwritten signature in cursive that reads "Lawrence R. Allen".

Lawrence R. Allen, PhD

Dean



Special Acknowledgements

Each year, planning and implementing the Forum involves teamwork. The Forum's Planning and Implementation Team of faculty, staff, and students ensures that important tasks, large and small, are completed to make the Forum evolve smoothly. *To these people, I send a very special thank you.* Their coordination and cooperation are incredible strengths for our College.

On behalf of the College of Health, Education, and Human Development, we take this opportunity to acknowledge the efforts of this team as well as those of the College Research Committee for their guidance and promotion of the Forum.

Forum Planning and Implementation Team

- Susie McGhee Administrative Assistant – Associate Deans' Office
- Karin Emmons Media Resources Specialist – Department of PRTM
- Kristen Lawson HEHD Learning Resource Center
- Bobbi Curry HEHD Center for Research and Collaborative Activities
- Martie Thompson HEHD Center for Research and Collaborative Activities
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- Bettie Hudson HEHD Center for Research and Collaborative Activities
- Melinda Fischer HEHD Center for Research and Collaborative Activities
- Jean McKendry HEHD Center for Research and Collaborative Activities
- Cindy Hartman Student Support
- April Smith Student Support
- Brad Bradley Student Support

2013 – 2014 HEHD Research Committee

- Amy Milsom Eugene T. Moore School of Education
- Cassie Quigley Eugene T. Moore School of Education
- Beth Reynolds National Dropout Prevention Center
- Dart Schmalz Department of Parks, Recreation, and Tourism Management
- Shirley Timmons School of Nursing
- Khoa Truong Department of Public Health
- Paula Watt Joseph F. Sullivan Center

**Thank you for your contributions to our College
and especially to the Spring Forum.**



*Spring HEHD Research Forum
April 24, 2014*

AGENDA

- 11:00 a.m. – 12:00 p.m. SET-UP FOR POSTER PRESENTATIONS**
- 12:00 – 1:00 p.m. POSTER JUDGING FOR UNDERGRADUATE AND GRADUATE POSTER AWARDS**
- 1:00 – 1:30 p.m. ATTENDEE CHECK-IN AND REFRESHMENTS**
Hendrix Student Center
- 1:30 – 1:40 p.m. WELCOME AND OPENING REMARKS**
Hendrix Center Ballroom
- Larry Allen**
Dean, College of Health, Education & Human Development
- 1:40 – 2:30 p.m. RESEARCH PRESENTATIONS**
Conversations and Viewing of Posters
Hendrix Center Ballroom
- 2:30 – 2:40 p.m. ANNOUNCEMENT OF POSTER AWARDS (Undergraduate and Graduate)**
- Amy Milsom and Shirley Timmons**
HEHD Research Committee Members
- 2:40 - 2:45 p.m. CLOSING REMARKS**
- Kathy Headley**
Associate Dean for Research and Graduate Studies

**THANK YOU FOR YOUR PARTICIPATION IN
THE SPRING 2014 HEHD RESEARCH FORUM.**

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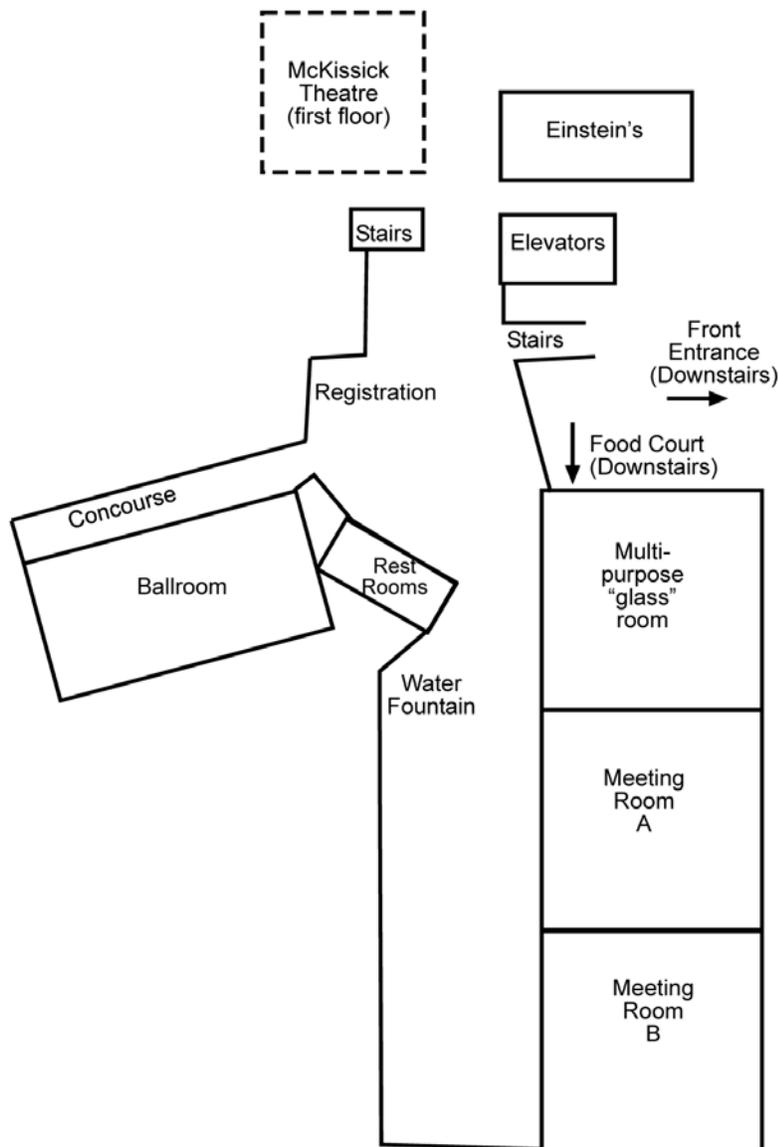
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The complete HEHD Research Forum booklet with detailed abstracts can be found on the Research Website at <http://www.clemson.edu/hehd/research/research-forum/index/html>.

Hendrix Center - Points of Interest for Research Forum Participants



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Use of a Peer-Led Intervention to Reduce Obesity of Those with Hypertension

Purpose: The purpose of this study was to improve hypertension control of adults over the age of 60 years residing in a rural county of South Carolina who participated in a peer-led program, Health Coaches for Hypertension Control. This program was developed to promote hypertension self-management as 65.4% of those over 60 years have a hypertension diagnosis and the Healthy People 2020 objective is to increase the proportion of adults with hypertension who have it under control from 43.7% to 61.2%.

Methods: Trained community volunteers engaged program participants in eight core educational modules about hypertension self-management and eight additional modules in nutrition and physical activity. The modules followed guidelines of the Joint National Committee 7 (JNC 7) recommending lifestyle modifications including weight reduction through following a DASH eating plan and increasing physical activity to 30 minutes most days of the week. Participants completed health risk appraisals with blood work and surveys on knowledge, stage of readiness, and self-efficacy with data collection at baseline, 8 weeks and 16 weeks.

Results: Participants demonstrated statistically significant increases in hypertension-related knowledge from baseline to eight weeks that persisted at 16 weeks, as well as significant improvements in stage of readiness to change behaviors, and in behaviors such as physical activity and healthy eating. Further, clinically significant decreases in all outcome measures were observed, with statistically significant changes in systolic BP (-5.781 mmHg; $p=0.001$) and weight (-2.475 lb; $p<0.001$).

Conclusions: This presentation describes a university-community-hospital system model using peer educators that effectively promotes weight loss as an aspect of hypertension self-management in a rural Appalachian county.

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Teacher Visioning: Negotiating Obstacles in the Classroom Context

Effective teaching is a complex art, one that is often complicated by district and school level obstacles that can confound the novice teacher. Mandates that restrict instructional practices (no Writer's Workshop) or restrict teacher judgment (only 3 reading groups are permitted) make it difficult for new teachers to effectively apply the professional judgment they develop in their teacher preparation programs. This longitudinal research study sought to describe the development of teaching visions in two teacher preparation formats and how teachers negotiated obstacles in their teaching environments.

The nine participants represented two teacher preparation routes: Five students were traditionally prepared through a Master of Arts in Teaching program, and four students were members of the *Teach for America* (TFA) program. All students received their coursework through the same university in the mid-Atlantic region of the US, although the TFA teachers participated in condensed coursework while they were teachers of record in urban public school classrooms. The traditionally prepared teachers were followed through their field experiences, teaching internships, and then into their first schools. All participants were followed for three years.

Collective case studies were used to describe the phenomenon of developing teacher visions, asking the following research questions: (1) What are these teachers' visions for teaching? (2) What obstacles to their visions exist in their teaching environments? (3) How do these teachers negotiate obstacles to their visions?

The findings suggest similarities and differences between the two teacher preparation routes. Some of the differences can be attributed to the teaching contexts connected to the two programs (suburban versus inner city) and reasons for exploring the teaching profession (career versus social justice). Across groups, however, reflective practices were noted, as were reports of "going rogue" as a means of negotiating obstacles to teaching visions. These results inform teacher preparation programs, suggesting that visioning provides both a compass and measuring stick for reflecting on and adapting teaching practices.

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Protective Effects of Red Raspberry Consumption on Chemo Brain in Breast Cancer Patients

Patients receiving chemotherapy are often aware of a mild cognitive impairment or mental cloudiness which may persist for some time following treatment. This condition has been recognized by physicians over the years and termed chemo brain. Studies in this laboratory are aimed at understanding the underlying causes of this memory problem in breast cancer patients. Previous *in vitro* studies by this laboratory demonstrated that red raspberry extract mitigates the toxic effects of chemotherapy drugs on the metabolic activity and neurite growth of NGF-induced PC12 cells. To further evaluate this result, breast cancer patients were recruited to consume red raspberries during their chemotherapy treatments. Their plasma was used to evaluate the neuroprotective characteristics of red raspberry consumption on differentiated PC12 cells in culture. The plasma was added to the growth medium of PC12 cells and, once neurite growth was prominent, the PC12 cells were treated with H₂O₂ to induce apoptosis. Morphological changes of apoptosis were evaluated by Hoechst staining under fluorescence microscope. Chromatin condensation and nuclear shrinkage were observed as positive markers for damage by the H₂O₂. The metabolic activity of the H₂O₂-challenged differentiate PC12 cells was also evaluate by MTS assay to assess the neuroprotective effect of the plasma. Preliminary data indicate that the consumption of red raspberries by breast cancer patients undergoing chemotherapy may provide a protective advantage from chemo brain.

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Inquiry in Motion: A Professional Development Program Improving Science Teachers' Ability to Perform Quality Inquiry Instruction

Transforming teacher practice continues to be a challenge for educational researchers. With the newest science reform movement, the Next Generation Science Standards (NGSS), and the Common Core State Standards in Mathematics, it is important to develop and research initiatives with the goal of transforming teacher practice. Inquiry in Motion is a grant funded project that has been running for five years. The goal of this project is to supply middle school science and mathematics teachers with professional development opportunities focused on improving the quality and quantity of their inquiry instruction.

The professional development supplied to the teachers focused on providing support and training to improve inquiry-based instruction. Teachers were provided two weeks of teacher training in the summer, four group follow up sessions during the academic year, four or more full class observations with debriefing after, and numerous individual support sessions. The summer primarily involved modeling examples of practice, debriefing practice, and developing new inquiry-based lessons in teams. Support during the academic year included co-planning, co-teaching, observations and debriefing observed classroom instruction.

Support for Inquiry in Motion has been provided by Clemson University, the SC Commission on Higher Education, the National Science Foundation, Greenville County Schools, Oconee County Schools, Anderson School District 4, and Anderson School Districts 1, 4, and 5.

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Improving Inquiry Instructional Practice in Middle School Science Classes: Applying Vroom's VIE Theory of Motivation

While inquiry-based instruction is seen to have the potential to increase student achievement, teachers do not always value this type of instruction, nor do they always have high self-efficacy for engaging students in this type of instruction. Teacher beliefs about certain practices (expectancies), their value of certain outcomes, and their belief that certain practices can lead to valued outcomes (instrumentality) is among the reasons why teachers choose to use inquiry-based instruction. It is often claimed that professional development programs can be a driving force to change teachers' positions on these constructs thus motivating teachers to choose to reform their instruction.

The aim of this mixed methods study was to determine: 1) If Vroom's VIE theory of motivation could provide insight into why teachers choose to implement inquiry-based instruction in their classroom and 2) If there was a relationship between teacher knowledge of inquiry instruction and their inquiry-based practices. The participants in this study were 36 middle school science teachers who were involved in a year-long professional development program designed to increase the quality of their inquiry instruction. The findings from this study suggest that teachers' expectancies are positively related to their practice and that knowledge may be a factor that contributes to this relationship. Implications and recommendations for educational researchers and designers of professional development are provided.

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Applying Cognitive-Affective System Theory to Science Teachers' Choice to Enact Reform-Based Practices

With a society that is constantly changing, it is not surprising that our educational system continuously mandates change. Although many subject domains experience this pressure to change, science education has a long history of encouraging constructivist style teaching through the practice of inquiry-based instruction. Science education is in the midst of yet another educational reform movement in the form of the Next Generation Science Standards (NGSS). Research attests to the fact that while professional development (PD) helps change teacher practice, not all teachers change after experiencing PD. While there are many reasons for teachers' struggle to change as a result of PD, researchers show that individual differences in teachers' person variables (e.g., beliefs, values, goals, perceptions) are a significant determinant of teacher behavior. Although much research looks at these person variables, they often only give attention to pieces of the larger puzzle. Specifically, they do not provide a sufficient picture regarding how science teachers process information regarding new practices they are being encouraged to use due to their individual differences in relevant person variables. With this perspective, personality psychology offers assistance.

The purpose of this paper is to theoretically apply the cognitive-affective personality system theory to science education. In doing so, we hope to provide a comprehensive model that gives attention to the entire process that teachers go through when choosing to perform reform-based behavior. This model takes into the patterns of this process starting from when teachers select and encode information concerning reform-based practices to when they perform and sustain these said behaviors. This model will provide educational researchers with the ability to clarify and better understand the integration, as well as, the relationship between teachers' person variables and the situations they experience in PD and their classrooms and thus a different perspective of why some teachers change their practice after PD which encourages constructivist pedagogy. This clarification and better understanding will assist in the designing of PD as it will better attune researchers to the necessity of differentiating PD to take into account the differences of the groups they are encouraging to change.

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GENE: Genetic Essentials in Undergraduate Nursing Education

Background: Genetic advances have changed the nature of healthcare practice nationally; however, there is limited information available about the incorporation of genetics into nursing curricula. The American Association of Colleges of Nursing revised the following guidelines to include recommendations for the integration of genetics into nursing curricula: the *Essentials of Baccalaureate Education for Professional Nursing Practice* (2008) and the *Essentials of Masters Education in Nursing* (2011). Incorporation of genetics into nursing curricula is vital to ensure future nurses have a basic understanding of how genetic principles impact practice.

Objective: The purpose of this research was to evaluate the amount of genetic content incorporated into the curricula at various levels within the undergraduate and RN/BSN nursing programs at Clemson University's School of Nursing.

Method: This study evaluated all required nursing specific classes' syllabi and textbooks for the Baccalaureate of Science nursing program. Genetic and genomic key words and phrases were searched within each syllabi as well as correlating textbook and lab manual chapters. The genetic word count in these syllabi and associated classroom materials were compared to the total word count. For areas where genetics was referenced, further information was obtained to determine which genetic concepts were being taught in that nursing course.

Results: Preliminary analyses revealed that of all syllabi analyzed (n=29), only 3 had any mention of genetics or genomics. Additional analyses of textbooks and lab materials (n=25) revealed 21 contained genetics or genomics concepts.

Conclusion: Increasing the amount of genetic content in the Baccalaureate of Science curriculum is imperative to adequately prepare future healthcare providers to meet the genetic and genomic needs of their patients. Preliminary results indicate a need for recommendations and continued integration of genetics into both didactic and clinical components of both the undergraduate and RN/BSN program's nursing curricula to enhance genetic knowledge in nurses and impact patient care and outcomes.

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Don't Turn on the Light! Exploring Summer Camping Professionals' Opinions and Attitudes on Ghost Stories at Camp

Summer camps have been in existence in the United States for over 150 years (Henderson, Whitaker, Bialeschki, Scanlin, & Thurber, 2007). The American Camping Association, or ACA, camping community strives to focus on physical, social, and emotional growth of individual campers, stimulation of active participation, and building individual relationships and community (American Camping Association, 2013). Summer camps have been viewed as an opportunity for youth to challenge and overcome their fears through structured activities where intrinsic motivation is high and support is abundant (Campora, 1998). One particular activity of interest is ghost stories.

There is disagreement in the camping world as to whether or not ghost stories should be shared with campers. The primary purpose of ghost stories is to challenge and define the boundaries of the real world in a safe manner (Ellis, 1981). It can be argued that ghost stories actually offer an avenue for youth to deal with their fears in a safe way. The storyteller provides the reader or listener with a safe context for exploration. They can imagine they are on the edge of a disaster but it is carefully controlled (Campora, 1998). Ghost stories provide an approach for resiliency, which targets factors that provide the listener with the capacity to withstand both psychological and social pressures (Nelson, McClintock, Perez-Ferguson, Shawver, Thompson, 2008).

This study intends to explore opinions and gain an understanding of attitudes towards sharing ghost stories with youth at summer camp. Using a mixed methods approach of short surveys and detailed interviews, camping professionals from ACA accredited camps at various levels will be asked for their insight as to why or why not they feel ghost stories are important in their camp. The data is intended to be collected at multiple ACA Regional Conferences that will be held in the Fall of 2014. Information regarding individual camp's histories, types of ghost stories or non-ghost stories shared with campers, reasoning behind sharing the specific stories, and assessment of camper reactions is desired. The new information that is collected will be used to help bring enlightening knowledge regarding the debate on ghost stories.

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Family Role Strain and Its Impact on Women with Breast Cancer

The purpose of this study is to examine the degree that breast cancer diagnosis and treatments impacts family dynamics, and to devise and implement a program to support families. The research question being evaluated is how the diagnosis and treatment of breast cancer impacts the patient and her relationship with family members psychosocially and emotionally. Previous studies have found that breast cancer diagnosis and treatment negatively impacts both the patient and her family. As nursing students, this research team is interested in discovering the impact of a breast cancer diagnosis on a family and learning how nurses can provide support based on these findings.

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Overcoming Aqua-phobia: A Pilot Study of Transitioning from Fear to Participation

Problem and Purpose: The mission of any learn-to-swim program is to equip individuals with the skills and confidence to safely participate in water activities. Many of these programs primarily focus on children, but little is known about the effectiveness of these programs with respect to adults. The purpose of this project was to evaluate the effectiveness of the Aquaphobics program by identifying common themes in the pre-contemplation, contemplation and maintenance stages of the transtheoretical model.

Subjects: Participants of the study were recruited from an adult swim lesson program “Aquaphobics” located at the Central Clemson Recreation in Central, South Carolina. A total of 8 participants were involved in the study 2 Males, 6 Females; ages between 25 and 65, including White, Asian and African-American ethnicities.

Methodology: The creator of the program conducted a focus group with assistance from the swim instructor. Interview questions were developed based on each stage of the Trans-theoretical Model of Behavioral Change: Pre-Contemplation, Contemplation, Preparation, Action and Maintenance. Questions were provided to participants in advance, responses were recorded and transcribed. Focus group data was analyzed and coded for common themes within each stage of the model.

Findings: Findings revealed participants expressed a strong motivation and personal courage to learn how to swim despite their fear of water. The catalyst for the participants’ fear of water varied slightly among participants (fear of drowning, fear of engaging in a dangerous activity, family perpetuated fear of water and family or friend water related death or accident). Participants emphasized constraints associated with the pre-contemplation stage were non-existent due to “no cost” and “no limit on lessons” set-up of the program. All participants are currently in the action phase of the model and attribute their continued progress to the effectiveness of the instructor. Although participants have not reached the maintenance phase of the model, all participants were able to articulate clear examples or milestones of what their maintenance phase would consist of.

Implications: This focus group was useful in gaining information that can be used to help improve the current Aquaphobics program. The participants’ five suggestions for immediate implementation were (a) provide more instructors with the skill and knowledge of the current instructor, (b) schedule a group meeting once a month for participants to share their stories and progress, (c) start all newcomers in the warm water therapy pool; (d) provide more lanes for class during the summer months, and (e) increase the temperature of the lap pool by three degrees.

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Effects of Cyber-bullying on Male and Female Adolescents

Research has shown that involvement in cyber-bullying, as a victim or as a perpetrator, uniquely contributes to poor psychological functioning among adolescents. Current statistics indicated that females are twice as likely as males to be upset by online bullying (Williams & Guerra, 2007). The purpose of this study was to investigate electronic bullying and gender in relation to mental health among adolescents. A sample from the 2011 Youth Risk Behavior Surveillance System (YRBSS) was restricted to adolescents aged 14 to 16. Responses to questions related to the study variables were analyzed with Statistical Package for the Social Sciences (SPSS) software. It was found that victims of electronic bullying reported more feelings of sadness and suicide attempts than did non-victims. It was also found that the magnitude of these relationships did not vary significantly between males and females. These results suggest that cyber-bullying has adverse effects on the psychological functioning of both male and female adolescents and those victims may benefit from counseling.

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Genomic and Clinical Assessment of Norrie Disease

The Purpose/Problem Statement: Norrie Disease is a very rare x-linked recessive disorder that affects males from birth. The primary feature is congenital blindness. The purpose of this poster is to discuss the clinical features of Norrie Disease, assess the pattern of genetic inheritance with family history and pedigree data, highlight the genetic diagnosis via linkage analysis, deletion/duplication assay, and gene sequencing techniques, and indicate treatment of Norrie Disease. Mutation of the *NDP* gene, the subsequent disruption in the Norrin protein, the resulting phenotype in individuals affected by this mutation, as well as clinical diagnosis and treatment, are features of this presentation. The genetic component of Norrie Disease is a focus. Up to date clinical diagnostic techniques are outlined.

Methodology and Results: Relevant comprehensive search using specific search terms such as “Norrie Disease”, “Clinical features of ND”, “Norrie Disease Pseudoglioma (*NDP*) Gene”, “*NDP* protein”, “PND diagnosis”, “ND clinical diagnosis”, ND and linkage analysis”, “Xp11.4”, “gene ID 4693”, “ND treatment”, “ND prevention” used to look up appropriate literature. Different databases used to find the articles with broader search terms. The databases include PubMed, scholarly article search through Clemson library, OMIM, NCBI, Europe PMC, UCSC Genome Browser, Genetics Association Database, GeneCards, UniProt, EMBL-EBI, and Google scholar. The journal articles dated after 2009 were selected for more investigation (few seminal articles from older publications are also used). The next step was to read the abstracts and assess the papers for further examination. The results from each study closely related to the subject were included in the poster. Genomic database search were also performed in order to find updated data associated with *NDP* gene and Norrie disease.

Summary and Discussion: ND is a rarely inherited condition that can be clinically diagnosed using a three-generational pedigree, a physical examination including a thorough ophthalmic examination, neurological examination, hearing tests, B ultrasound scan, Computed Tomography of Brain and molecular genetic testing of *NDP* gene. Genomic assessment includes sequence analysis of the entire coding region, deletion/duplication analysis, and linkage analysis. Genetic testing for *NDP* is available nationally at Emory Genetics Laboratory and Massachusetts General Hospital, and internationally in a few countries. Genetic counselling along with carrier testing for at-risk females, prenatal testing, and family planning are available when a disease-causing mutation has been identified in the family.

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Education and Training Needs Assessment of Public Affairs Employees in the National Park Service

It is important to periodically assess a workforce's perceptions of and abilities to carry out job competencies in order to ensure effectiveness. The National Park Service has never undertaken such a study for employees with public affairs responsibilities. With administrative reorganization, changing priorities, and tight budgets it's crucial to spend training dollars in the most efficient way. In order to make informed training decisions the National Park Service Stephen T. Mather Training Center and Office of Communications paired up with Clemson University to launch an assessment of the entire Public Affairs field. The objectives of the study were to a) establish baseline competencies to perform satisfactorily at various levels within the organization; b) assess the importance of these competencies to the performance of each employee, given their present position; c) assess the level of preparedness of employees to perform these competencies; and d) determine the gaps existing between the importance assigned to, and perceived preparation to perform, each competency. An online survey was distributed to 425 employees in the first two months of 2013 and received a 48.2% response rate. Five different technical competencies and eight leadership competencies were evaluated. About 60% of employees spent 20% or more of their time in public affairs duties, while approximately 40% of employees spent less than 20% of their time on public affairs responsibilities. All of the competencies received importance levels between 5.47 and 6.56, indicating a high importance for all job competencies. The technical competencies, Communications Strategy, Message Delivery, Data Gathering and Analysis, and Federal, Departmental, and Agency Policy and Procedures all exhibited the highest gaps. The results of the analysis reveal the most important areas for training. They also highlight the divide in the population between significant public affairs job duties and minimal public affairs job duties. This study will be a valuable asset for the National Park Service in designing and implementing education and training for the Public Affairs field.

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Empowering Teachers with Low-Intensity Strategies to Support Instruction

The purpose of Empowering Teachers with Low-Intensity Strategies to Support Instruction is to enable university students to design, implement, and evaluate low-intensity strategies to support instruction in local schools. Low-intensity supports are established teacher-directed supports designed to increase student engagement, reduce disruptive behavior, improve work completion, and improve academic outcomes for preK-12 students in local public schools. We will provide an overview of our project as well as report outcomes from data collected during the spring 2014 semester. Working with a teacher and student teacher in an elementary resource classroom, we saw an increase in academic engagement and active academic engagement increase for our three students using a self-monitoring intervention. Treatment fidelity, social validity, limitation, and future directions will be discussed.

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Zonulin: A Pathway to Autism Spectrum Disorders

Zonulin is a precursor for haptoglobin 2 (HP2) and functions to regulate tight junctions. Modulation of the tight junctions allows macromolecules to pass, causing a disruption in homeostatic mechanisms that play important roles in the development of immunity and disease. So far the symptoms related to permeation of the epithelial barriers have been correlated to autoimmune diseases and cancer, but there is reason to believe that similar gastrointestinal and neurological symptoms may be seen in persons with autism spectrum disorder (ASD).

The specific aim of this study is to determine if increased serum levels of zonulin or haptoglobin 2 (HP2) genotypes are directly associated with an increased risk of ASDs. Serum zonulin levels and HP genotypes are determined from three groups: individuals diagnosed with ASD and GI symptoms, individuals diagnosed with ASD and no GI symptoms, and healthy controls. Due to HP2 genotype associations with cardiovascular events and diabetes, both diseases related to increased zonulin levels, this study explores relationships between HP2 genotypes and autism spectrum disorders. The observational or quantitative scores from the autism rating scales help determine the severity of autism phenotypes, which will be used to determine how efficient zonulin serum concentrations are at detecting severity levels of autism. Autism rating scales have been chosen for this test design due to the lack of a clinical diagnostic test for autism. Results of increased serum zonulin concentrations or HP2 genotypes are anticipated to be directly correlated with increased risk of ASD suggesting a probable use in diagnostic applications.

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Gender & Physical Activity and their Relationship to Binge Drinking and Overall Frequency of Alcohol Consumption among Adolescents

The purpose of this study is to explore the relationship between physical activity (PA) and overall frequency of alcohol consumption and binge drinking among adolescents. Alcohol use among adolescents has become a tremendous public health concern over the past few decades. Alcohol use in adolescence is often predictive of future alcohol abuse and can eventually lead to the development of many chronic diseases.

It was hypothesized that males would have higher rates of binge drinking and overall frequency of alcohol consumption than would females. PA also was hypothesized to show strong associations with binge drinking and overall frequency of alcohol consumption among males than among females.

The sample was pulled from the 2011 Youth Risk Behavior Surveillance System (YRBSS), which used a systematic equal probability sampling of 9-12 graders. When doing the analysis, we excluded adolescent's ages 12 and 13, which restricted the sample to high school students between ages 14-18. We used Analysis of Variance (ANOVA) to look at the relationships among the study variables.

Consistent with our hypothesis, males were found to consume more alcohol versus females. Though a select-few research studies have found an association between higher levels of PA and high levels of alcohol use, the large association we found was unexpected. Additionally, we predicted appropriately in that PA would have a greater influence on alcohol consumption among males; however, we did not fully anticipate the highest levels of alcohol use to occur primarily among physically active males.

While many previous studies have determined the importance of PA in advancing health-related outcomes, relatively few studies have examined the relationship between PA and specific problem health behaviors among the adolescent population. Therefore, identifying the characteristics that influence the relationship between PA and alcohol use is important for clarifying this empirical question that remains largely undefined in the existing literature. Furthermore, if a certain proportion of individuals who heavily engage in PA are identified to be at risk of excessively consuming/binging alcohol, it would stand to reason that this population would be important to target for future alcohol abuse prevention and intervention programs.

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A Prospective Study of Resuscitative Outcomes at a Downtown Greenville SC Hospital Using Connect Care versus CodeNet for Cardiac Arrest Documentation

Introduction/Background: Cardiopulmonary arrest is a major health problem claiming 350,000 to 450,000 lives per year in the United States. Survival has increased to 49% from the use of Automated External Defibrillators (AED) by lay personnel in settings outside the hospital setting. Studies have demonstrated that the use of AED's improved outcomes from cardiac arrest, (Hallstrom, A., & Ornato, J. P. 2004, Stiell, I., Nichol, G., Wells, G., Maio, V., Nesbitt, L., Blackburn, J., et al. 2003, Page R.L., Joglar, A. J., Kowal, R. C., 2000), but there is limited research with the use of AED's within medical facilities. According to the American Heart Association (2002) there are no reliable national statistics on survival from cardiopulmonary arrest, as reporting varies from each treatment facility within the United States and does not allow for a comprehensive reporting system. Furthermore, A preliminary study (Whitcomb, et al 2011) of resuscitative outcomes over a 48 month period demonstrated there were 122 data points not documented and of those 64 were critical elements, such as rhythm at time of arrest, time to first shock, time of first responder and length of arrest

ZOLL recently came out with a new product called CodeNet™ that is the first complete electronic system for capturing and analyzing code event data. CodeNet gives the recorder more control over the entire resuscitation solving the problem of inaccurate, incomplete, and hard-to-manage data. The result is better information you can use to improve protocols, streamline procedures, enhance TJC compliance, and improve outcomes.

The purpose of this comparative, exploratory study is to describe the clinical characteristics/outcomes of a cardiac resuscitative event associated with "Code Blue" team response. This study will use the current method of documenting and recording cardiac arrest events via Connect Care, electronic documentation and simultaneously use the Codenet device to record the same event

Specific Aims: The specific aims of this study are to describe clinical characteristics of and emergency Code Blue response to patients who require sudden cardiac resuscitation located at a mid-sized hospital (downtown) Greenville over 12 months. The five specific aims are:

1. Describe patient demographics, cardiac risk factors associated with sudden cardiac resuscitative events.
2. Describe the percent of code blue patients with convertible rhythms.
3. Describe the length of time between key code blue sequences.
4. Describe the percent survivability of code blue patients.
5. Describe the location of cardiopulmonary arrest and

6. Compare data collected using current method of code documentation (Connectcare) compared to that using the Codenet device on all documented codes.

Methods: Chart review (cardiac arrest sheet) of cardiopulmonary arrest for 12 months, Jan 1 2013 to June 2013 and data collected with the Zoll CodeNet from cardiac arrest that occurred in the ICU and CCU. The two data collection techniques will be compared to see which recorded the event more comprehensively and accurately.

Statistical Analysis: Non-comparative descriptive statistics will be used in the data analysis. Frequency counts analyzed as percent sample characteristics and mean response times will be the major units of analysis.

Results: The results from this pilot study were limited due to the small number of cardiac arrest events within the study location and a more active role of end of life decisions. Age range was 40-83 years of age, 4 males and 1 female. Co-morbidities included HTN, DM, COPD, CHF, ESRD, CAD and morbid obesity. LOS ranged from 1-16 days. Initial CPR was started 14-20 seconds from the onset of arrest. The first epinephrine was given 38-56 seconds from start of arrest. Only 2 subjects survived arrest and zero subjects survived to discharge. Average length of arrest ranged from 3 minutes to 49 minutes. Rhythm most commonly documented was bradycardia followed by PEA and SVT. Overall the hand held device provided a more detailed description of the cardiac arrest event versus the electronic charting. The standard electronic charting was difficult to document on because of the way in which it is set-up within the system and the multiple pages that needed to be used. The hand held device was much easier to document the events in real-time because of the touch screen and time stamping ability. Greater detail was obtained with the hand-held device increasing data collection by 50% in terms of when CPR was started, when medications were given and over sequence of the code event.

Implications: This preliminary study of CodeNet could show that there is a more accurate way to record cardiac arrest. With positive results more studies could be conducted that would help improve protocols and guidelines that dictate how cardiac arrest is documented. Having more information about a patient's outcome during a cardiac arrest could help researchers understand which interventions have the best outcomes. This could increase the survival rate of those who have a cardiac arrest and their recovery.

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Teachers' Perceptions of an Online Professional Development System in Algebra Progress Monitoring

Purpose: The purpose of this research project is to gather teachers' feedback about the content, usability, and technological features of an online professional development system for algebra progress monitoring. The online system was developed as part of a federally funded Institute of Educational Sciences grant awarded to Iowa State University with Clemson University as a partner. The system includes information on the purpose of progress monitoring, training in how to administer and score three progress monitoring measures, and instruction on how to use a data management component. In this final phase of the grant, the goal is to use the teachers' feedback to improve the pilot system before it is released to the public.

Subject: The participants for this project include 29 general algebra and special education teachers located in three states across the United States: South Carolina ($n = 12$), Minnesota ($n = 3$), and Iowa ($n = 14$). For this presentation, the focus will be on the South Carolina participants (5 general algebra teachers; 7 special education teachers).

Research Methodology: In this formative research design, which uses an iterative process of successive teacher trials with the online system, teachers are expected to rate the usability, content, and presentation of information in the online modules on a Likert-scale ranging from 1 (lowest) to 5 (highest). Teachers also provided open-ended responses regarding areas of strength with the system and areas needing improvement. Currently, the final cohort of teachers is providing feedback on the system. Based on this information, researchers will make additional changes to the online system this summer for a public release date in time for the next academic year.

Summary of Findings: Preliminary results indicate strong ratings from teachers. They gave positive evaluations of the usability of the system, the content, and the quality of the technological features within the 11 instructional modules. Participants also expressed that the time spent to complete the modules was reasonable and allowed them freedom to complete modules on their own time and at their own pace. The most common complaint with the system has been inconsistent access due to problems with the server.

Conclusions/Implications: In the last year of this 5-year, federally funded grant, the goal is to take teacher feedback and use it to refine the online system one final time. Once revisions have been made, the online professional development and data management product will be made available for general use. More information about this project and its findings can be found at the public website: http://www.education.iastate.edu/c_i/pdapm/

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Education Leadership P-12 Program

Leading Innovation: The Role of Principals and Early College High Schools

One issue facing educators today is how to ensure that high school students, especially those from disadvantaged backgrounds, are college and career ready. In response to this challenge, the Early College High School Initiative was started in 2002 (American Institutes, 2008). The author conducted a synthesis of studies last year and even though principals are traditionally the leader at most schools, findings about their role within an early college high school were sparse. Therefore, this review of literature builds upon previous research on the role of principals with a focus on principals that work within innovative environments such as ECHSs. This review discusses implications for leadership preparation programs and provides suggestions for future research on principals in innovative environments.

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Healthcare Genetics

ACTG: Assessment of Curricula in Teaching Genetics

Learner objectives: To describe genetic and genomic content in the Baccalaureate and Masters of Science in nursing curricula in the Clemson University School of Nursing and to compare genetic knowledge among current populations of Baccalaureate and Masters of Science nursing students in the Clemson University School of Nursing.

Purpose statement: The purpose of this research is to explore the integration of genetic and genomic content within didactic and clinical components of the Baccalaureate and Masters of Science in nursing curricula at Clemson University's School of Nursing and to evaluate student knowledge of genetics at various levels within the nursing programs.

Abstract: The purpose of this research is to explore the integration of genetic and genomic content within both didactic and clinical components of the Baccalaureate and Masters of Science in nursing curricula in the Clemson University School of Nursing. With genetics and genomics redefining traditional healthcare, there is a recognized need for genetic concepts to be taught within undergraduate and graduate nursing curricula. The AACN Essentials of Baccalaureate Education for Professional Nursing Practice (2008), AACN Essentials of Master' Education in Nursing (2011), Essentials of Genetic and Genomic Nursing: Competencies, Curricula Guidelines, and Outcome Indicators (2008), and Essential Genetic and Genomic Competencies for Nurses with Graduate Degrees (2011) provide guidelines for the identification of the integrated genetic content within the nursing curricula. The goals of this research are to assess current genetic content and application in the Clemson University nursing curricula and to evaluate genetic knowledge among the current populations of nursing students at various levels throughout the program. This unique research will involve curriculum assessment using the following techniques: course syllabi and calendar reviews, textbook reviews with faculty surveys and/or interviews. Current student knowledge will be assessed using the Genetic Literacy Assessment Instrument (GLAI) (Bowling, 2008). Outcomes of this research will identify areas of strong versus limited genetic content within the levels of the nursing curricula. Based on study findings, recommendations and changes will be made to ensure that all guidelines and competencies are being met within the Clemson University School of Nursing curricula and that graduates are assured of current genetic and genomic knowledge that can be applied in the changing healthcare arena.

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TIGERS: The Investigation of Genetic Education for nuRsing Students

Background: Advances in genetics and genomics have changed the nature of healthcare practice nationally. As a result, the American Association of Colleges of Nursing revised the *Essentials of Baccalaureate Education for Professional Nursing Practice* (2008) and the *Essentials of Masters Education in Nursing* (2011) to include recommendations for integration of genetics into nursing curricula. Incorporation of genetics and genomics is vital to ensure nurses have a basic understanding of genetic principles and how to incorporate these principals into nursing practice.

Objective: The purpose of this study was to evaluate student knowledge of genetics in the undergraduate and graduate nursing programs at Clemson University School of Nursing.

Method: This study explored genetic knowledge of 193 students in both the Baccalaureate and Masters of Science nursing program curricula. Baseline genetic knowledge was surveyed using the Genetic Literacy Assessment Instrument (GLAI), a 31 question survey which examines knowledge of general genetic concepts. Demographic and survey data were collected and analyzed for 5 undergraduate classes and 2 graduate classes between September 5-26, 2013.

Results: Preliminary analyses revealed overall mean score differences (n= 31) between undergraduate and graduate students; 20.42 and 15.43 respectively. Overall knowledge deficits existed in content related to ethnicity and relationships between genes and trait expression for both program levels.

Conclusion: Preliminary results reflect a need for continued integration of genetics into both didactic and clinical components of undergraduate and graduate nursing education to further enhance knowledge and understanding of genetics in healthcare. Increasing genetic knowledge of Baccalaureate and Masters of Science nursing students is imperative to meet future healthcare trends related to genetics and genomics.

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Civic Learning and Higher Education

Trends in civic engagement in the United States and around the world paint a dreary picture of disconnected youth and young adults. A steady decline of participation in a wide range of political activities, from signing petitions to attending rallies, has elicited great concern over the past few decades (Putnam, 2000). While such findings have led universities to develop a wide range of interventions to connect undergraduates to the citizenship issues of the larger world (Colby, Ehrlich, Beaumont & Stephens, 2003), data suggest that postsecondary institutions are not doing enough to prepare citizens for engaged participation in civic and democratic life (Duncan, Kanter & Ochoa, 2012). Higher education must recommit to civic learning as a central purpose of their institutions, but further research on effective programs and practices for enhancing civic learning among university students is essential to achieving this goal.

This study of 305 undergraduate students explored the efficacy of two related Clemson university programs, using measures of civic knowledge, civic skills, and civic values, which were created as proxies for Saltmarsh's (2005) civic learning components. Community Scholars (CS), funded by Clemson's Public Service Activities, is a scholarship program for incoming students who display community leadership. The program requires students to engage in 56 hours of community service a semester, participate in group service projects, and take four 1-credit seminars over four years. Civics and Service House (CASH) is a broader program open to all service-oriented undergraduates. Members of CASH may reside in the living-learning community and are required to participate in group service projects and group meetings. Community Scholars, CASH members, and a random sample of Clemson University undergraduates (who were not in these programs but living in student housing) completed a web-based survey about their civic knowledge, civic skills, and civic values during the fall semesters of 2010 and 2012. One-way ANOVA analyses revealed that members of CS and CASH scored significantly higher on constructs related to community service and civic influence than nonmembers. Members of CS scored significantly higher than nonmembers on civic attitudes and likelihood of working in social change in the future, and members of CASH scored higher than nonmembers on civic efficacy. While the results do not assume causality, it is reasonable to conclude that university civic engagement programs help promote civic learning among interested undergraduate students. These programs should continue to support undergraduate students and similar programs must be adapted at other universities. Further implementation and evaluation of civic learning programming will ultimately allow universities to build campus-wide policies and initiatives to produce generations of civically engaged citizens.

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Why Trauma-Informed Care is Necessary for Residential Shelters Caring for Child Survivors of Domestic Minor Sex Trafficking

A trauma-informed care framework for residential shelters may assist with the healing process for child survivors of domestic sex trafficking. Domestic minor sex trafficking (DMST) is the commercial sexual exploitation of children within the borders of the United States, a crime with complex psychological and physical consequences. At present, the placement of child survivors includes runaway and homeless shelters, group homes, and juvenile detention centers to name but a few facilities. These facilities use a variety of treatment models to care for children such as the Positive Peer Culture and the Teaching Family Model. Research, however, is beginning to show the need for trauma-informed systems of care for organizations responsible for housing and treating youth, in general, because of the likelihood of trauma experiences. This literature review seeks to acquaint readers with the potential benefits of trauma-informed care for child survivors of domestic trafficking. Many youth in residential shelters, including survivors of domestic sex trafficking, may benefit from facilities that use a trauma-informed approach. A trauma-informed approach considers all aspects of programming from the mission statement to service delivery and follows trauma-informed principles that include trauma-awareness, physical and emotional safety, rebuild control, and a strengths-based approach. Additional research is necessary to determine which trauma-informed models, such as the Sanctuary Model and the Trauma Recovery and Empowerment Model, may work best for child survivors of domestic sex trafficking.

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Advanced EMS Treatment and Survival after Cardiac Arrest

Successful cardiac arrest management requires the coordination of a number of advanced treatments simultaneously to demonstrate positive outcomes. In order to improve this multi-faceted process, Greenville County Emergency Medical Services (GCEMS) put into place multiple protocol and training changes over the course of 2011 and through May 2012. Changes made include the introduction of an annual survivor ceremony, streamlined guidelines and treatment processes, increased scope of care for paramedics, and the shift to a completely evidence-based training program. These modifications targeted the professionalism of the paramedics and EMS system culture simultaneously. This new cardiac arrest management program's impact will be assessed at both the individual and population health levels.

The purpose of this retrospective study is to examine the efficacy of the systematic and cultural changes put into place by GCEMS. With the cooperation of Greenville Health System, we examined patient outcomes and records to analyze and assess the effectiveness of the new practices and guidelines. Key outcome measures such as patient neurological status, hospital readmission frequency, and cost measures were used to evaluate the impact of these changes. Adult, non-traumatic out of hospital cardiac arrest victims terminated in the field or transported to a Greenville Health System hospital between January 1, 2010 to December 31, 2010 (pre-intervention period) or June 1, 2012 to May 31, 2013 (post-intervention period) were included in the study. No data from 2011 will be analyzed; this period makes the transitional phase during which the treatment protocol changes were being implemented.

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I Can't Read That: A Closer Look at Reading Recovery

Reading Recovery is a short-term intervention targeted at the lowest achieving readers in first grade. During the course of the program, students receive daily one-on-one instruction in reading and writing in an effort to accelerate their learning. In this pilot study, changes in reading level and reading motivation of students participating in Reading Recovery are compared with those students identified as below-grade level but who did not qualify for the Reading Recovery program. Analysis of the data indicated that students identified and served through Reading Recovery have lower initial reading scores than the comparison group. Yet after participating in Reading Recovery, the initially lower scoring Reading Recovery students were at the same reading level or slightly higher than the initially more proficient peers in the comparison group. Motivation scores were initially higher for the Reading Recovery group, but at the conclusion of the intervention there was no statistically significant difference in the motivation levels between the groups. Findings validated that Reading Recovery assessments properly identify the lowest first grade readers in most need of intervention.

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Understanding Motivation for Visitors' Food Consumption in Festival

Food in tourism has been ignored or taken for grant due to the general concept that food is an essential necessity. However, recently food in tourism research is recognized as a major component of tourism resource that impact on tourists' destination choice and adds value to the tourist experience. With tourists' increasing interest in tasting local food while travelling, foods not only satiate tourists' hunger but also fulfill their experiential needs. The tourist experience is analyzed from two perspectives. One is the peak experience that constitutes the major motive to travel and the other is the supporting experience which can be further elaborated through their respective relationships to the daily experience. The experience of food consumption in tourism can be understood as the peak touristic experience as well as the supporting experience. Food consuming is an extension of daily routine experience. This can be distinguished by motives to choose food. In spite of current attention on the role of food within the context of the tourist experience, little research has been done regarding what motivation affect tourist food consumption.

The purpose of this study is to empirically investigate festival visitor's food consumption within tourism experience perspective through understanding their motivation for food consumption on a festival site. The specific objectives of this study are to determine festival visitors' motivation for food consumption and to examine if visitor characteristics (e.g., demographic profile and previous festival experience) vary with food choice motivation. Furthermore, this study will identify festival visitor types based on motives to attending a festival and explore any differences between visitor types with regarding their food consuming motivation. A quantitative approach will be used for the purpose of this research. Surveys will be conducted on a festival site in South/North Carolina and the target population is the festival attendees. Anticipated results of this study will be useful to understand festival visitors' food experience and develop event plans regarding foodservice aiming to satisfy festival attendees.

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Undocumented Latino Young Adults and Recreation

The purpose of this study is to create an understanding of the recreational experiences of Latino young adults of the 1.5-generation who do not have a legal immigration status in the United States. This population faces a unique set of challenges in their transition to adulthood and their pursuit of higher education. Three common factors among undocumented young adults who have been successful in school are extra familial mentors, positive social supports, and supplementary educational programming. Contact theory is the idea that increased contact between social groups promotes a decrease in discrimination and an increase in inclusion and understanding. Currently, there is little research that explores how this population engages in recreation. This research will seek to understand how recreational experiences of undocumented young adults contribute to contact theory and the three factors related to success in school. Qualitative semi-structured interviews, with undocumented young adults over the age of 18, who qualify for Deferred Action for Childhood Arrivals and who are enrolled in higher education, will be used. The data will be transcribed verbatim and analyzed thematically. Due to the difficult access to this population, snowball sampling will be used beginning with college-level instructors who know or teach undocumented students.

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Glanzmann's Thrombasthenia

The purpose of this review is to compile the most recent literature about Glanzmann's Thrombasthenia (GT), a rare autosomal recessive disorder characterized by mucocutaneous bleeding as a result of inadequate platelet aggregation in response to physiological stimuli. GT exhibits an autosomal recessive inheritance pattern. It is believed to be relatively rare although the exact rate of the disease is unknown due to a lack of worldwide epidemiological data on the disease.

GT is caused mainly by mutations in ITGA2B and ITGB3; however over 100 potential GT causing mutations have been identified. Mutations associated with GT vary and range from single point mutations to large deletions. Testing of GT can be accomplished clinically through tests such as Prothrombin Time (PT) or Partial Thromboplastin Time (PTT) to analyze clotting time and genetically using different PCR testing techniques as well as high-resolution melting (HRM) screening.

The goal of these numerous test methods is to try and find common gene mutation triggers. Currently, there is no cure for GT and treatment is centered on symptom management.

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Predictors of Dating Violence among Rural Teens: An Ecological Perspective

Dating violence among adolescents presents a significant concern with an array of potentially negative consequences for adolescents, families, communities, and the society at large. Despite a growing body of research on the problem, evidence is yet to be established about the prevalence of teen dating violence in rural areas and the risk and protective factors of violence perpetration and victimization among teens in dating relationships. This poster reports selected findings from the first year (2011-2012) of a four-year, multi-level cohort sequential study of dating violence among adolescents aged 12 to 19 living in rural South Carolina. Logistic regression analyses showed that the odds of dating violence victimization increased with substance use, depression, knowing a female victim of domestic violence, and having a caregiver who has been a victim of forced sexual intercourse. The odds of dating violence victimization decreased for those adolescents who were members of one or more community organizations, lived in a stable neighborhood, and whose caregivers reported higher levels of nurturing parenting. Violence perpetration was predicted by teen beliefs about violence, peer influences, being a victim of violence, and the caregiver's perceptions of social support from family and friends. These findings provide directions for policy and program development to prevent teen dating violence among rural adolescents.

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Social and Community Factors Shaping Information, Motivation, and Behavioral Skills in Heart Failure Patients' Dietary Adherence

Heart failure is a global, deadly, and expensive disease. Patients with heart failure must overcome a complex set of behavioral and attitudinal obstacles if they wish to live longer than the average 5 years post-diagnosis. Adherence to a restricted sodium diet is a major challenge facing heart failure patients. The knowledge possessed (or lack thereof) by heart failure patients regarding sodium restricted is linked to their adherence to restricted sodium diets. Patients may believe that they are following a low-sodium diet, urinary sodium levels and self-reports indicate that they are not.

Our two objectives were to

- (1) identify Information, Motivation, and Behavioral skill related (IMB) barriers to dietary adherence
- (2) understand how these barriers were shaped by patients' social and community contexts.

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Perceptions of Tourists about Local Foods in Tanzania

Consumption of local food is broadly recognized as an essential part of tourists' experience. Locally distinctive food can be important both as a tourism attraction in itself and in helping to shape the image of a destination. Local food experiences have the potential to contribute considerably to sustainable development, help maintain regional identities and support agricultural diversification. While local foods have the potential to reduce poverty in rural communities, their image and perception to tourists remain largely unexamined. The aim of this paper is to evaluate the way international tourists perceive local food in Tanzania. Data was collected using questionnaires (N = 540) at Kilimanjaro International Airport (KIA), which serves tourists who have just completed their visits from the most popular "Northern Circuit" of Tanzania National Parks. Data was analyzed using SPSS. The findings show that (74.5%) of the respondents agreed that overall local food was of good quality and (58.5%) agreed that local food was safe to eat. However, respondents felt strongly that the hotels they stayed in did not provide many varieties of local foods (42.3%) or sufficient information about local foods (36.5%).

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The SC Witness Project: A Model for Improving Breast and Cervical Cancer Knowledge, Awareness and Screening among African Americans

South Carolina (SC) has some of the largest health disparities in the nation, and the most dramatic of these are associated with elevated cancer death rates among African Americans (AA). In response to this public health challenge, the South Carolina Cancer Disparities Community Network (SCDCN-II) was formed. AA women have lower breast cancer incidence, yet higher mortality and higher cervical cancer incidence and mortality compared to white women in SC. The SCDCN recognizes that for many communities, and particularly for AA living in the southeastern US, churches, or faith communities, play a significant role in people's lives. The Witness Project is an evidence-based breast and cervical cancer educational program for African American women. Witnesses are breast and cervical cancer survivors who are trained as Witness Role Models or Lay Health Advisors to increase awareness, knowledge, and screening behaviors among African American women in churches and community settings. Between 2008 and 2014, the SC Witness Project trained 404 Witness volunteers reaching 8,897 individuals; 769 women have been referred for screening. Behavioral Intentions were measured at pre- and post-test 68% of participants 20 years or older indicated that they intend to get a clinical breast exam within the next year. 68% of participants 40 years or older indicated that they intend to get a mammogram within the next year. 70% of participants 21 years or older indicated that they intend to get a Pap test within the next year. 85% of participants indicated that they intend to find out more about vaccines that are available to protect against HPV infection.

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Cutting Corners or Improving Quality: Are In-Person Interpreters Really Better?

Language access plays a vital role in the effective provision of medical care. The growing limited English proficiency (LEP) population and lack of bilingual healthcare providers warrant the need for cost-effective language services. Research has shown that the presence of qualified medical interpreters is correlated with enhanced patient satisfaction, better patient-provider communication, improved clinical quality, reduced medical errors, better patient outcomes, and cost-effective use of healthcare services. Despite the compelling evidence of the benefits of language accessibility in the healthcare system, many hospitals and physician practices report being ill prepared to meet the linguistic needs of the increasingly diverse LEP patients seeking medical care in the United States. Three main types of medical interpreting services include: in-person, telephonic, and video conferencing. While in-person interpretation services may be the preferred method among hospital staff, these services are often inefficient due to time lost during transportation to clinical sites and waiting for the provider. Longer wait times for interpreting services may lead healthcare staff to use unqualified medical interpreters such as family members or bilingual staff. The goal of this study is to assess the underlying reasons why healthcare staff will cut corners and use untrained medical interpreters. A cross-sectional study was conducted to assess the perceptions of health service providers regarding the overall impact of different interpretation modalities on accessibility, efficiency, quality, effectiveness, and cost. The survey instrument used a 5-point rating scale to evaluate the study variables. The survey was administered in-person to a convenience sample of 150 health service providers at a large regional hospital in the Southeastern United States immediately following the completion of in-person (n=50), video (n=50), or telephonic (n = 50) interpreting services in an ambulatory or in-patient setting. Fifty four (54%) and 21.3% of respondents indicated that “ability to communicate effectively during the clinical encounter” and “ability to ensure that every patient who needs an interpreter has access to one” respectively, were the most important considerations in selecting an interpreter. When queried about likelihood of using an unqualified interpreter, 34.7% indicated that an “inability to locate a qualified medical interpreter for the patient’s language” or “having to wait for an interpreter” (32%) were factors. In-person interpreters may increase quality in one way (inside the clinical encounter) but potentially lead to decreased quality in another way-causing longer wait times and therefore lead to staff cutting corners through the use of unqualified interpreters.

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The Effects of Bibliotherapy on Health Outcomes

Numerous alternative therapies - such as art, music, and pet therapies - have been researched and proven to aid in positive health outcomes for patients. Reading therapy, however, has not been extensively researched. Studies point to the beneficial effects of positive communication in healthcare and the need for providers to empathetically interact with patients. Reading therapy encourages meaningful patient interactions that are often lacking in today's healthcare system, and could assist in the healing process. Volunteer students attended a three-hour training session on proper techniques for reading to patients, including training on selection of reading material for each patient. Readings were selected from a research team-created anthology- "A Dose of Prose"- a compilation of various literature forms appropriate for health care settings. Post-training, volunteers conducted reading therapy (alternatively, "bibliotherapy") sessions with patients of approximately 30 minutes with a focus on positive communication. Sessions were conducted in various healthcare settings, including hospices, hospitals, and assisted care facilities. Patients completed pre- and post-session surveys ranking their mood, calmness, and alertness. Analysis of over two hundred sessions found statistically significant improvements in mood and calmness after the bibliotherapy session.

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Introducing the Basics of Palliative Care to College Level Students

The research team conducted a study to explore the knowledge of college students regarding palliative care. The focus is on background information regarding palliative care, which was analyzed and implemented into modules in order to teach Clemson University Nursing students to communicate with loved ones at the end of life. An in-depth literature review was executed to showcase present research regarding the topic of palliative care and how this research pertains to the goal of educating students about communication with the dying. After the presentation of the teaching module, students completed a survey that compared their comfort with the subject before and after the module. These surveys were analyzed using a t-test to determine significance of the module. The data presented concludes that there is a significant difference in the comfort level regarding palliative care in students after completion of the teaching module. The aim is to emphasize the importance of understanding the needs of those at the end of life so that students can communicate effectively and provide adequate palliative care.

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Impacts of Community Based Eco-Tourism Initiatives on Poaching Reduction and Livelihood Change in and around Nyungwe National Park, Rwanda

Loss of biodiversity in Nyungwe National Park, a protected area in southwestern Rwanda has been a major concern to the government and conservation partners both. Over the years the park has been plagued by several illegal activities ranging from hunting for bush-meat, mining, wildfires, bamboo cutting and many more where communities around the park are generally recognized as perpetrators of these illegal activities. In a way to reduce and stop this threat, the government of Rwanda and conservation partners initiated and invested in Community Based Ecotourism Initiatives (CBETi) around the park to improve the socio-economic livelihood of communities around the park as an incentive for conservation. The key assumption is that by increasing initiatives that improves the socio-economic livelihoods of local people around the park will increase community's support for conservation, reduce threats and demand for park resources.

Six CBETi initiatives around Nyungwe National Park were selected for this study using opportunistic and snowballing sampling. Semi-structured interviews with community cooperative members and focus group interviews with community/ opinion leaders and park managers were conducted. This study also analyzed ranger based monitoring (RBM) data of illegal activities from 2008-2012 as well as community socio-economic status. It also explored issues and challenges affecting CBETi's, their impacts on alleviating poverty and stopping illegal activities in around Nyungwe National Park. The study findings show that given the large population of communities around Nyungwe National Park and poverty levels, CBETi's have not been able to neither improve the socio-economic livelihoods of communities around the park nor alter illegal activities and other threats to the park. Although, they possess the potential to change negative attitude and behavior, there is need to invest more in CBETi's in order to reach more communities, involve communities in project selection, planning and management as well as implementation of initiatives that affect them.

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A Review of Literary Tourism: A Case for a Gender Analysis

Many locations employ literary connections as a way of attracting tourists and creating, improving, or reinforcing place identity (Laing & Frost, 2012; Westover, 2012). However, the creation, interpretation and consumption of many literary destinations work together in perpetuating and reinforcing particular gender norms and stereotypes. Yet, while literary tourism research has explored who literary tourists are (Herbert, 2001; Watson, 2006), the motivations of literary tourists (Laing & Frost, 2012), the broader relationships between books and travel (Laing & Frost, 2012), the consequences of layering literary heritage on a landscape (Lowe, 2012; Luftig, 1996), and the practical side of managing literary sites including management and marketing strategies (Muresan & Smith, 1998), absent from the literary tourism canon is an analysis of the gendered interpretation of literary tourism sites.

The application of a gender lens to the phenomena of literary tourism is important because literary sites are particularly susceptible to perpetuating stereotypes due to their perceived authority to blend fact and fiction in the name of solidifying literary connections (Lowe, 2012); yet, many literary figures and authors, particularly in the U.S. are idolized as heroes, secular saints or founding father figures (Herbert, 2001; Laing & Frost, 2012; Ousby, 1990; Westover, 2012). In this sense, literary tourism may reflect beyond its niche certain characteristics of American society and their beliefs about gender. Therefore, the purpose of this poster presentation is exploratory in nature and seeks to review and synthesize the scholarly literature related to literary tourism and contends that the application of a gender lens to the literary tourism phenomena is both missing from the literature and a necessary endeavor.

Both memorialization as a form of public history or heritage, and tourism are social phenomena that are created and operate within the gendered societies in which they exist (Swain, 1995), thus both are also constructed and consumed reflecting the society's power structures which are often tied to gender in addition to class and race (Graham, Ashworth & Tunbridge, 2000; Lowenthal, 1998). A gender analysis explores the ways that "women and men are thus involved differently in this (sic) construction and consumption of tourism" (Swain, 1995, p. 249). For example, researchers have noted the absence of women in heritage representations and historical narratives of national identities (Edensor & Kothari, 1994), while literature, conversely has long been seen as a forum for discussing and challenging gender roles particularly by women (e.g. Ardis, 1990; Pearson & Pope, 1981). Both the tourism and the heritage industries have been charged with privileging the white, heterosexual, male gaze by feminizing nature as a place to be conquered by man, celebrating masculine endeavors like war and adventure, and depicting women as wives and mothers in need of protection (Prichard & Morgan, 2000b). Yet little research has been done to determine whether or how these gendered characteristics have carried over to literary tourism sites. Therefore a clear and focused review of the research related to the phenomena of literary tourism is necessary.

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Genetics of African Iron Overload

The purpose and/or problem statement: The purpose of this review of literature is to elucidate the genetic mechanisms underlying African Iron Overload (AIO). African Iron Overload occurs almost solely in peoples of sub-Saharan African descent, affecting 10% of the population (McNamara, Fordeuk, & Macphail, 2005). Because of its extreme environment x gene interaction AIO can give a novel perspective to the body of knowledge on hereditary hemochromatosis, a much more common disorder, and fill in the gaps in the process of hepcidin-mediated down-regulation of ferroportin.

Description of the research methodology used: For this review, the Online Mendelian Inheritance in Man (OMIM), PubMed, Web of Knowledge, and UCSC Genome Browser databases were used to identify the seminal research articles and the primary gene relating to AIO (Kent et al., 2005; OMIM, 2000).

Summary of the finding: African Iron Overload is a form of hemochromatosis that is triggered by excessive iron intake, primarily from a high iron content native beer (Kew & Asare, 2007). The excess iron is stored in the liver, bone marrow, and spleen, as well as reticuloendothelial cells. This may lead to cirrhosis of the liver, hepatocellular carcinoma, and increased risk of infection, particularly tuberculosis (Mayo et al., 1998).

The primary gene thought to be responsible for AIO is *SLC40A1*, at 2q32 (Kent et al., 2005; Siddique & Kowdley, 2012). This gene encodes ferroportin, an iron transport protein that moves iron from the small intestine the bloodstream. When iron levels are adequate, ferroportin is bound by hepcidin, resulting in its breakdown. By a negative feedback mechanism, hepcidin serum levels fluctuate according to the body's iron level.

Conclusions and/or implications for practice: While AIO is a very rare condition, it's similarity to hereditary hemochromatosis make it an important tool for understanding these much more prevalent disorders (Fleming & Ponka, 2012). Furthermore, an better understanding would be beneficial for improving medical care in sub-Saharan Africa.

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Impact of Breast Milk on Obesity: A Possible Epigenetic Mechanism Influencing Metabolic Programming

Purpose: The purpose was to assess the growth of children in a cohort of Australian twins, to examine associations between duration of breastfeeding and growth at 18 months of age. Our hypothesis is the anthropometric measurements of the participants will be greater with shorter duration of breastfeeding.

Subjects: Data are from the Peri/postnatal Epigenetic Twins Study (PETS), an on-going longitudinal cohort of 250 pairs of Australian twins and their mothers recruited during their second trimester from January 2007 to September 2009 by the Murdoch Children's Research Institute at the Royal Children's Hospital in Melbourne, Australia. Exclusion criteria included a birth weight below 2000 grams or a congenital disease affecting appetite, feeding or growth. In this cross sectional study, data were from the 18 month old visit. The PETS participants were included in the breastfeeding analysis if they breastfed < 1 month, 1-3 months, or 4-6 months (n=179). Maternal variables included mother's age at delivery, mother's education, smoking, alcohol and folate during the first trimester, maternal weight gain and gestational diabetes. The child's variables included birth weight, gestational age, gender, zygosity, chorionicity and twin to twin transfusion syndrome.

Methods: The cross-sectional data is from a cohort at the 18 month visit (n=179) in the Peri/postnatal Epigenetics Twins Study (PETS), to assess the relationship between duration of breastfeeding and infant size at 18 months of age. Descriptive statistics of mother characteristics and infant characteristics from the sample were calculated. Infant size was defined based on a series of seven (7) anthropometric measurements: Body mass index (BMI), ponderal index, head circumference, left arm circumference, abdominal circumference, tricep skinfold thickness and subscapular skinfold thickness. Linear models and ANOVA techniques were used to estimate and test the relationship of these measurements to the duration of breastfeeding. Statistical significance was set at $P < 0.05$. All calculations were performed using SAS version 9.3.

Findings: The analysis suggested that infants breastfed for 1-3 months were significantly larger than infants breastfed for 4-6 months in terms of mean BMI (0.61 kg/m^2 ; $P=0.02$; 95% CI: 0.17-1.05), arm circumference (0.66 cm; $P=0.006$; 95% CI: 0.26-1.06) and abdominal circumference (1.16 cm; $P=0.03$; 95% CI: 0.26-2.06). The analysis also suggested that infants breastfed for less than 1 month were significantly larger than infants breastfed for 4-6 months in terms of mean arm circumference (0.72 cm; $P=0.009$; 95% CI: 0.26-1.17).

Conclusions/Implications: Supplementing with non-breast milk before 4 months of age was associated with an increased BMI, arm circumference, abdominal circumference at 18 month months of age. The mean BMI decreased from 85% to 65% when infants were breastfed for 4-6 months as compared to infant's breastfeeding for 1-3 months. Breastfeeding for 4-6 months appeared to protect against the risk of obesity for the children in the PETS. Understanding the interactions of diet and nutrition with our epigenome allow healthcare providers to tailor education and interventions focused on early life nutritional habits to help prevent obesity.

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Campus Professional's Perceptions of the Career Development of Sorority Members

This qualitative study explored campus professionals' perceptions of sorority women's career development at a mid-sized public institution. The problem is the lack of research on how the sorority experience impacts a member's career development. The researchers grounded the study in Super's Developmental Theory (1980), which is focused on the idea of an individual's roles in life over a lifetime or life span. Super's life stages included: growth, exploration, establishment, maintenance, disengagement (1980).

The researchers conducted semi-structured interviews with five female campus professionals: 2 affiliated with National Panhellenic Conference (NPC), 2 affiliated with National Panhellenic Council, Inc. (NPHC), and 1 affiliated with local sorority at her undergraduate institution. Participants came from different undergraduate and graduate institutions and affiliated at different points their collegiate years. Participants held formal and informal roles within their organizations and experienced a variety of advising or supervisory roles post-graduation. The researchers used descriptive coding to analyze the data and identified four themes: alignment of environment and values, connection between life cycle and membership, balancing multiple formal and inform roles, and impact of past experiences on future experiences. Membership provided an environment where students can attain certain work values outlined by Super (1980), for example: achievement, altruism, creative, and social interaction. Membership reflected life cycle stages as growth, exploration, establishment, maintenance, and decline (Super, 1980). Participants identified empowering, pivotal, or challenging times that helped students advance through these stages as well as reconciling who they and the rest of the members were in and outside of their organizations, chapters, or councils. The participants used the language of different life roles: mother, daughter, citizen, etc... (Super, 1980). Participants also noted how positive and negative experiences in formal and informal roles affect future collegiate and post-collegiate roles.

Student affairs practitioners can provide earlier education and support on how to transition between formal and informal roles within the chapter, council, and community. Providing structured reflection through group or one-on-one advising can be an intervention to avoid one role consuming a student's identity. Career centers and offices of fraternity/sorority life can partner to organize opportunities to help students articulate how this experience aligns with overall career development. Ultimately, if members live out their self-concepts by maintaining and transitioning between life-roles while in college, they could apply this process to life post-college.

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Perceptions of Body Image Held by Mothers and Daughters

Body image is affected by many socio-cultural factors, including the mass media, one's peers, and the family unit. Research concludes that mothers are the primary agent by whom young girls learn about their body and body image. It has been theorized that girls imitate their mothers' body image concerns; consequently, there is a need to better understand the relationship between body image in mothers and daughters. The primary purpose of this study is to explore the relationships between mothers and daughters perceptions of body image. Eight 7th grade girls attending Riverside Middle School in Pendleton, SC and their mother or female guardian were recruited for this study. The middle school girls were 10-12 years old, in good academic standing, and were not involved in school athletics at the time. Both the mothers' and daughters' body image was assessed using the Body Esteem Scale for Adolescents and Adults (BESAA) at the beginning of the academic school year. The BESAA consists of three subscales: 1) BE-Appearance, 2) BE-Weight, and 3) BE-Attribution. Preliminary results of this study suggest that mothers' and daughters' perception of body image are highly correlated. This information can provide parents with more knowledge regarding the effect same-sex adult role models have on an adolescents' body image; specifically, how a young girls' personal body image is greatly determined by that her mother or female caretaker.

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**Developing Indicators and Standards at Pinnacles National Park:
Application of the VERP Planning Framework**

Pinnacles National Monument draws a growing number of visitors for day hiking and to observe its resident California Condors, wildflowers, and unique cave formations. Application of the National Park Service's Visitor Experience and Resource Protection (VERP) Framework was supported by conducting a visitor survey in 2012 (N = 393). This survey used attitudinal questions, photo simulations and normative approaches to 1) refine and validate indicators for the visitor experience, and 2) gather data to help formulate standards for crowding at main attraction sites, hiking encounters, waiting times for parking, and waiting times to enter caves. Additional data were collected to assess the monument's experiential carrying capacity by comparing standards against reported conditions. Results indicate that conditions experienced by visitors are on average better than their reported standards and that very few people are displaced by current use conditions. Implications for visitor use management and monitoring of future conditions are presented.

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The Creation of the Mountain Lakes AccessHealth Community Dental Clinic: A Service Learning Experience and a Case Study Report

There is currently a dental care crisis in America with large numbers of citizens deprived of dental insurance and, therefore, lacking dental care. The US Surgeon General has termed this a “silent epidemic” due to the immense health problems associated with a lack of dental care, but ignorance of the public on this issue. The dental safety net is a separate system of care from the traditional private practice, defined variously as facilities, providers, and payment programs that are for underserved populations.

Mountain Lakes AccessHealth is a case management program located within Oconee Medical Center where participants are able to receive medical care from volunteer providers. Though this program has been extremely successful in providing medical services since its opening in March 2012, much of the population was still lacking dental care. Thus, the idea was born for the creation of the Mountain Lakes AccessHealth Community Dental Clinic, to serve uninsured patients who are ages 18-65 and residents of the Mountain Lakes community (Oconee County, Clemson, Central, and Six Mile) at or below 200% of the Federal Poverty Level.

The purpose of this case study is to outline the creation of the Mountain Lakes AccessHealth Community Dental Clinic including topics such as organization, challenges, sustainability, and goals. The information on the initial phases of this clinic may be used to inspire similar clinics throughout the country, in hopes of strengthening the dental safety net nationwide.

Information for this report was gathered by conducting a series of face-to-face interviews with individuals involved in the start-up of the Mountain Lakes AccessHealth Community Dental Clinic including members of the advisory committee, volunteer dentists, and volunteer dental hygienists. Additionally, official documents were assessed including advisory committee meeting minutes and grant proposals.

Key findings included the need for a diverse advisory committee, persistent recruitment of volunteer dentists and dental hygienists, generous funding, a clear manual of policies and procedures, a central location, and organized teamwork. With the solid initial infrastructure of this clinic, challenges for its sustainability include obtaining continued funding and maintaining volunteers. The goal of this clinic is to prevent chronic illness and improve the lives of people in the Mountain Lakes community.

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Perceived Barriers to International Student Transitions in Higher Education

Purpose: The purpose of the study was to look at international students' transitions to their host institutions of higher education. The study utilized a phenomenological approach to examine the potential barriers and common experiences international students faced during their transition to a specific institution.

Subjects: The subjects were three undergraduate students (one male, two female) who were non-degree seeking international students attending a large public research university in the Southeast from one semester to one year.

Research Methodology: Students were contacted by a member of the study abroad office who knew they were non-degree seeking international students who had not attended the institution for more than one year. Then, the participants volunteered for an individual interview. Interview topics included academic and social adjustment to their host institution, types of resources used in their transition, and the types of financial means used to support their study abroad. After conducting structured interviews, the researchers analyzed the data for common themes.

Summary of Findings: Overall, students' comments were more negative than positive. All students commented that they faced difficulty in their academic transitions to their host institution. Students also felt they were often misunderstood because of language barriers that may have existed if they were not native English speakers. Additionally, the students felt the initial communication and/or contact they received from the host institution did not assist them positively in their transition.

Conclusions/Implications: The results showed that a specific group of international students faced difficulties in their transition to the host institution. Students' comments pointed out the difficulties they faced in several areas of their transition. In particular, students struggled in the area of communication both pre-departure and during their time on campus with members of the community. Student affairs professionals should be aware of these difficulties and help international students during their transition to campus. Communication methods should be improved so students feel supported prior to their arrival on campus. Additionally, student affairs professionals should work to develop programs to assist students if they are facing transition difficulties during their time on campus.

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Bridging the Gap: A Quantitative Analysis of the Lateral Transfer Experience

Purpose: The purpose of this study was to compare the post-transfer experience and the effects of transfer shock on vertical and lateral transfer students. This study aimed to compare the two groups of transfer students on three levels. First, how did the rate of transfer students' reported levels of transfer shock compare between the two groups of lateral and vertical transfer students? Second, how did vertical and lateral transfers differ in terms of post-transfer satisfaction with their collegiate experience? And third, how did vertical and lateral transfers differ in terms of post-transfer satisfaction concerning non-academic factors of student success?

Subjects: Seventy-two transfer students, who attended a large, public, research university in the Southeast for at least one full semester, and who had not participated in the institution's partnership program with a local technical college.

Research Methodology: An email was sent to 626 students who transferred to the studied institution asking for participation in the anonymous survey. Through their responses, participants were then filtered into one of two categories: lateral transfers and vertical transfers. Survey questions focused on the participants' academic success and overall satisfaction post-transfer. The quantitative data from each group's survey responses was then analyzed using descriptive statistics.

Summary of Findings: Vertical transfers were slightly more at risk to experience transfer shock over lateral transfers; however, both groups experience transfer shock to some degree. Lateral transfer students reported a slightly higher satisfaction with their educational experience. Vertical transfers were slightly more likely to report emphasis on and satisfaction with the university's academic support resources than lateral transfer students. Additionally, vertical transfers had a moderately more positive association with their new institution and saw greater emphasis from the institution to provide them with social opportunities and resources for personal wellness and growth.

Conclusions/Implications: This study provided knowledge allowing administrators at the studied institution to develop and implement more programs to effectively target the academic success of vertical transfer students. Additionally, the results imply that the institution should seek to create evidence-based programming to promote engagement for lateral transfer students who have a less positive experience integrating socially than their vertical transfer peers. Future implications include expanding the survey to more institutions to assess if common trends exist among the subgroups of transfer students. Institutions will then be able to better adjust or create services to further enhance the transfer experience of the different subgroups to ensure their holistic collegiate success.

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Student Perceptions of Heteronormative Fraternity and Sorority Influence on Lesbian, Gay, Bisexual and Queer Identity Development

Purpose: This study sought to explore perceptions about lesbian, gay, bisexual, and/or queer (LGBQ) student identity development and those students' exposure to, participation in, or perceptions of traditional fraternity and sorority life.

Subjects: A total number of 127 participants from a large, research university in the Southeast responded to an initial demographic survey about fraternity and sorority involvement as well as gender and sexuality identifiers. Only 23 participants self-identified as non-heterosexual and of those, five participants were interviewed. Four identified as gay men, and one identified as a pansexual transwoman. Two of the four gay men were affiliated with a fraternity organization; the other non-affiliated participants provided opinions and perceptions of fraternity and sorority organizations and involvement.

Research Methodology: Using a qualitative research design, data was gathered using an anonymous survey sent to students who were publicly affiliated with an Interfraternity Council (IFC), National Pan-Hellenic Council (NPHC), or LGBQ organization on campus and voluntary subjects who wanted to participate further by giving a personal and confidential interview. Survey results provided demographics; five voluntary interviews were then conducted, recorded, coded, and analyzed for common themes, messages, and trends.

Summary of Findings: Data analysis suggested three prominent themes observed or perceived by LGBQ participants. The first had to do with the university's socio-political climate, and regional values. The second theme centered on students that identify as LGBQ and their perceptions of increased hardship and persecution from fraternities and sororities; often leading to their non-affiliation with these organizations for the sake of their own safety, personal development, or success. The third and final theme focused on the feeling that while LGBQ student could choose to affiliate, and some of them did, they perceived barriers within the fraternity and sorority organizations, and from members, that hindered their LGBQ identity development.

Conclusions/Implications: The results of this study indicated that social and cultural interactions are essential for individuals who are challenged by internalized myths about what it means to be LGBQ. Participants did not demonstrate a perception that fraternities and sororities provided a supportive network, thus limiting individual opportunities for holistic LGBQ identity development.

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Selecting a Sorority: The Influence of Values versus Socialized Image

Purpose: Joining a sorority offers many opportunities, including social events, academic achievement, and philanthropic activities. But what exactly is the driving force behind the reasons that tens of thousands of women join sororities each year? Could the idea of being perceived as a “sorority girl” with certain social privileges like attire and physical beauty be a factor? This study explored these aspects, from the congruence of values between a member and her organization, to the socialized image of who a sorority member is and how she believes society views her.

Subjects: 301 women (from a population size of approximately 2,500) who are members of the College Panhellenic Council, representing twelve chapters of Greek organizations at a large, public, research university in the Southeast, participated in the study.

Research Methodology: Students were contacted via email and invited to follow a link to an electronic survey in Campus Labs. Likert scale and short-answer questions were asked to gain both quantitative and qualitative data. Non-probability homogeneous purposive sampling was utilized.

Summary of Findings: Results demonstrated that when asked if the components of a socialized image (brand, body image, or social status) were reasons for joining a sorority, the quantitative responses indicated that little thought was given to the perceived socialized image associated with sorority membership. While women reported that organizational values are of greater importance than the socialized image of sorority membership, they are still aware of the social hierarchy during recruitment (“I feel you very much have to be skinny and in shape... to be in a ‘popular’ sorority and the bigger the girls, the lower the status of the hierarchy”); they alter their physical appearance and adhere to unspoken dress codes in an effort to gain acceptance to sororities, especially for sororities considered to be in the “top-tier” at the subject institution.

Conclusions/Implications: These findings led researchers to believe that potential new members are not in the mindset of selecting a sorority, but being selected *by* a sorority. Additionally, researchers concluded that the greatest deciding factor for women when joining a sorority was the desire to make new friends. It is relevant to note the self-altering and self-objectification that these women participate in to seek acceptance into these exclusive Greek communities. It would be valuable to this population of women to facilitate discussions that explore the importance of being true to oneself and to minimize society’s perception of who a “sorority girl” is and how she should look.

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Social Adjustment of First-Year STEM Students at Four-Year Institutions

Purpose: This study looked to understand the social adjustment and involvement definition of first-year STEM (science, technology, engineering, and math) students at four-year institutions. The researchers worked to understand whether first-year STEM students are socially adjusted by looking at campus organizations and resources (i.e., pre-enrollment programs, living-learning communities (LLCs), and campus involvement).

Subjects: Sixty-six first-year STEM students (57 general engineering, 7 computer science, and 2 chemistry majors) at a four-year, large, public research institution in the southeast chose to participate in the survey regarding their social adjustment.

Research Methodology: An anonymous survey was distributed through the STEM email listserv. The listserv reached some non-first-year students, and the students who did not meet the first-year criteria were automatically eliminated from the study. Students answered 17 questions, which included scaled response and free response. Additionally, eight of the questions regarded demographics. Students did not receive an incentive to participate in the survey. After students completed the survey, the researchers analyzed the data for common themes and keywords of involvement.

Summary of Findings: Of the first-year STEM students surveyed, 86.36% rated their social adjustment as “very adjusted” or “adjusted.” Friendships, participation in clubs and organizations, participation in pre-enrollment programs, and residential community involvement positively influenced students’ decision to continue at the institution. Additionally, the majority of survey participants defined involvement as active participation on campus (i.e., organization, club, group, team). The most frequent terms for involvement of students who met that “involvement definition” included group dynamics, attending events, and participation in pre-enrollment programs.

Conclusions/Implications: The findings suggested that LLCs had an impact on the overall adjustment of first-year STEM students. Students reported benefitting from and valuing campus involvement, and it was important to continue to make involvement opportunities available. Pre-enrollment activities did not have as large of an impact in aiding the social adjustment of first-year STEM students. With this information, the researchers encourage student affairs professionals to provide opportunities for LLCs and campus involvement.

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The Intersecting Identity Experiences of Undergraduate Women of Color in STEM Fields

Purpose: The purpose of this phenomenological study was to understand the experiences of Women of Color in Science, Technology, Engineering, and Math (STEM) fields at a predominately White institution. Women of Color will be defined as Black/African American, Hispanic/Latina, and Native American/Alaska Native. Asian American women will be excluded from this study based on their perceived status as “model minorities” and their disproportionate number of STEM degree recipients when compared to the population. Using the lens of intersectionality theory, our main objective was to collect student’s stories and allow them to speak to their own experiences. This perspective assisted in articulating the meaning of the participants in a way that was inclusive of both their gender and racial/ethnic identities.

Subjects: Eight Women of Color: Six Black/African-American females, two Multiracial females, one senior, two juniors, four sophomores, and one freshman.

Research Methodology: An initial survey was sent out through a university wide listserv to students of color. The survey asked for information on racial, gender, and academic classification. Those who chose to participate in a 60 minute interview also added their contact information. During the semi-structured interviews, all of which lasted between 20-40 minutes, researchers asked various open-ended questions and audio recorded the responses. After all interviews were completed, the researchers transcribed the interviews, coded, and pulled themes from each.

Summary of Findings: In contrast to the initial literature review, the researchers found that the students had a high level of self-perceived ability in their STEM classes. Themes included: Peers perceiving the women of color as less capable in the STEM classes, having a high level of racial saliency in STEM classes, students identifying their experience with their “Woman of color” Intersectionality, and feeling accepted and included within their university as a whole despite feeling a significant racial divide.

Conclusions/Implications: The findings showed that student affairs practitioners will need to continue furthering the research of Women of Color in STEM majors to gain a more in-depth look at their experiences. Investigation into discrimination and how it impacts students not only in the classroom, but throughout campus should be explored. Practitioners can provide support and encouragement to Women of Color in STEM majors and direct them to additional support services. Collaboration with faculty members will create a supportive environment for these students to grow and develop.

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Generation Why: Millennial Student Perception on Entering the Workforce

Purpose: This study sought to answer the question, “What is the Millennial students’ perception of the career world as they prepare to enter the workforce?” Employers have reported workplace tensions among Millennial students in first year positions. Determining the Millennial student perception of this issue would help inform student affairs practitioners on how to create interventions to prepare students for this transition. If students are unaware of the pending issue, they may not enlist in or understand the necessity of those interventions.

Subjects: Five upper-class students (three men, two women), living in upper-classman residence halls at a large, public, research university in the Southeast, who met the research definition of job-seeking, Millennial student.

Research Methodology: Students were recruited via email on their community listserv. Students who met the research definition of a Millennial job seeking student were invited to a focus group to speak about Millennials and the career search process. After completing the focus group, the researchers analyzed the data for common themes.

Summary of Findings: Students in the focus group exhibited traits that were consistent with those of Millennial students. A common theme of the existence of a misconception of Millennials and their abilities in the workforce emerged from the focus group conversation. The students felt there was a negative implication placed onto their value system. Many cited external pressures as a driving force in their career search and preparation. Finally, many felt that practical teaching and training methods were missing from the college experience.

Conclusions/Implications: The findings pointed to the need for student affairs practitioners to incorporate intervention-based programming and in-classroom reinforcement with practical skills for students to assimilate into the workforce. Academic engagement coupled with professional development topics and opportunities will guide Millennials to perceive the workplace as a place in which they can be successful.

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Exploring the Characteristics and Motivations of Undergraduate Student Leaders

Purpose: The purpose of the study was to discover the characteristics and perceptions of student leaders at a large, Southeastern, public land-grant university. The researchers hope to gain a greater understanding of who holds leadership positions and how the students perceived leadership. The purpose of the study was to discover if the student leaders fall into certain demographic populations as well as their motivations to become leaders. The researchers hope to use this information in order to reach out to diverse student populations and empower them to seek leadership positions/opportunities.

Subjects: The subjects of this study were 122 undergraduate student leaders, who were current active members of student organizations on campus.

Research Methodology: An email containing a link to the CampusLabs online survey was sent to the listed student contacts for each organization (president and treasurer), with a request to then forward to all active members. If the students chose to participate in the survey, they could take it at any time. After the survey closed, the researchers analyzed the data using descriptive statistics.

Summary of Findings: Students who identified as White (84%) and female (72%) represented the majority in this study. More than half (55%) of students surveyed indicated they wanted to pursue further education after graduation, while 37% were planning to seek full-time employment. The desire to influence and help others proved to be a main reason to become involved in a leadership position for 45% of students; while 34% indicated the motivation of pursuing further education/adding resume experience. Finally, the majority of participants were White females (72%) which did not align with the demographics of the university.

Conclusions/Implications: The findings point to the need for student affairs practitioners to further analyze why students are seeking leadership positions and why students who identify with a certain demographic population are not seeking positions. The researchers focused on first generation, race, and gender as factors that influenced students participating in leadership roles. The majority of respondents who held elected leadership positions in their first organization of choice were female (60%), White (78%), non-first generation students (86%). Males did not have a high response rate to the survey in general, because they either did not want to participate or they are not holding as many leadership positions. This may indicate that practitioners need to find common themes to better encourage and develop specific populations' leadership skills. Additionally, further research studies at other institutions could provide insight into motivations to lead and help practitioners develop programs to encourage leadership for underrepresented populations.

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Examining First Generation Student Persistence: A Student Perspective

Purpose: The purpose of this phenomenological study was to examine the current perceptions of the ability to persist, or move from one year to the next towards degree completion, for first-generation students at a large, public, research institution in the Southeast. There is a litany of contemporary research identifying challenges faced by first-generation students; this study aimed to have this population identify what impacts their success and ability to succeed in college.

Subjects: Six first-generation students who agreed to participate and had completed at least one full year of undergraduate course work.

Research Methodology: Students were intentionally invited to take part in the study based on their involvement with campus resources and programs aimed at supporting the first-generation population. Selected participants took part in a semi-structured interview with a member of the research team.

Summary of Findings: The six students interviewed discussed a myriad of factors, all of which in some way impacted their ability to persist through college. From these discussions, five major themes emerged: the impact of a local community, the importance of feeling scholastically successful, how family support helped them, the detriment of financial pressure and how the privilege of their peers affected their self-perceptions.

Conclusions/Implications: The findings concluded first generation students persist through college because they want a better future for their families and themselves. These students pushed themselves because they genuinely believed that a college education would provide an advantage in their future career. This drive from self-created goals and motivation was rarely seen in existing research on first-generation students. While first-generation students may still be at a disadvantage, tapping into these motivations can assist this population in overcoming the obstacles found in this study and previous studies. Anyone working with this population should understand that there might be unseen pressures at work that can discourage students and affect their persistence. Constant encouragement and connecting these students with people and resources that can positively impact their lives will not only help to motivate them, but eventually assist them in being the first members of their families to obtain a post-secondary degree.

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Preparing Students and Faculty to Advance the Study of the Black Experience in Education: Spring and Fall Research Workshops

Each spring and fall semester, the Charles H. Houston Center for the Study of the Black Experience in Education presents a research workshop for faculty, staff, and students who are interested in learning about research methods and analytical techniques used to conduct research on the Black experience in education. This workshop is designed to assist participants in conducting research that explores issues impacting the educational experiences and outcomes of African Americans, in utilizing research procedures to analyze data pertaining to African Americans in educational settings, and in applying theoretical and conceptual information to explore contemporary issues regarding the Black experience in education.

The workshop includes a brief discussion of current research at the Houston Center, studies and papers that are relevant to or illustrate the focus of the workshop, and a discussion of the workshop topic. Participants further explore the workshop topic through hands-on analyses using SPSS and real-world data sets. The workshop ends with a short discussion and question and answer session.

Most participants who responded to the evaluation survey rated the workshops either good (41%) or excellent (52%) (n=44). Participants appreciated working hands-on in SPSS, the non-threatening and flexible environment, and the relevance of the data to real-world research. A significant challenge, however, is addressing the varying levels of expertise participants bring to the workshop. A number of survey respondents have indicated the need for a workshop on SPSS basics while others have requested advanced topics such as regression analysis, analysis of variance, and hierarchical linear modeling.

A number of enhancements are being discussed for the future of the *Research Workshops*. These include exploring ways to increase the number of participants, exploring approaches that would improve participants' learning outcomes and collaborative opportunities, and conducting a needs assessment to identify particular issues pertaining to areas addressed by the *Research Workshops*. Also being considered are pursuing funding opportunities to support and enhance the workshops and recording the workshop.