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11th Annual Research Week

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*11th Annual Research Week
Event Proceedings*

FEBRUARY 19-23, 2018



OFFICE of RESEARCH &
GRADUATE STUDIES

11th Annual Research Week

February 19-23, 2018



In 2008, a new tradition of celebrating and showcasing academic accomplishments was established through Research Day. Over the years it has evolved into a week-long event filled with multidisciplinary presentations, demonstrations, and lectures. At the University of the Incarnate Word we take pride in our research and know that through our search for and communication of truth, we become stronger in educating “concerned and enlightened citizens within the global community.”

As we enter into our 11th year and the San Antonio Tricentennial, join us as we celebrate “A History of Mission Driven Scholarship” the week of February 19-23, 2018 at the Student Engagement Center.

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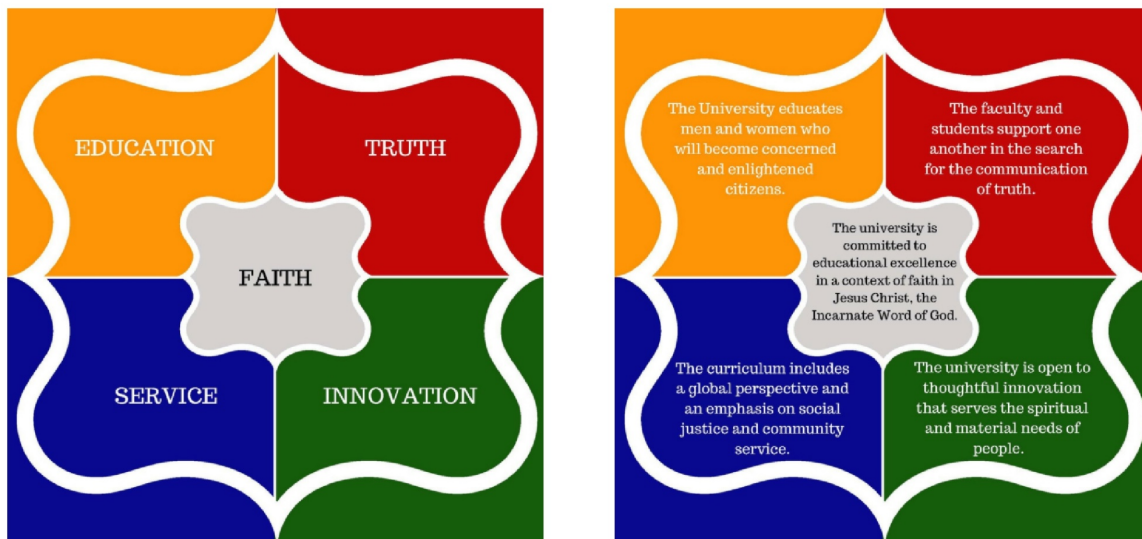
University Mission & Core Values

The first Sisters of Charity of the Incarnate Word, three young CCVI logo French women motivated by the love of God and their recognition of God's presence in each person, came to San Antonio in 1869 to minister to the sick and the poor. Their spirit of Christian service is perpetuated in the University of the Incarnate Word primarily through teaching and scholarship, encompassing research and artistic expression. Inspired by Judeo-Christian values, the Catholic Intellectual Tradition, and Catholic Social Teaching,¹ the University of the Incarnate Word aims to educate men and women who will become concerned and enlightened citizens within the global community.

The University of the Incarnate Word is committed to educational excellence in a context of faith in Jesus Christ, the Incarnate Word of God. Thus, through a liberal education² the university cultivates the development of the whole person and values of life-long learning. To that end, faculty and students support each other in the search for and communication of truth, thoughtful innovation, care of the environment, community service, and social justice.³

The University of the Incarnate Word is a Catholic institution that welcomes to its community persons of diverse backgrounds, in the belief that their respectful interaction advances the discovery of truth, mutual understanding, self-realization, and the common good.

Source: *The Mission of UIW. Retrieved at www.uiw.edu/mission*



The Moody Professorship

2017- 2018

This award was established in 1971 at UIW and Our Lady of the Lake University through a grant made to the two institutions by the Moody Foundation. Each year a faculty member is named Moody Professor from each institution. The awarding of the Moody Professorship reflects a high level of scholarship, teaching excellence, and community service attained by the recipient. This is the highest faculty honor bestowed by UIW. The Moody Professors must deliver two public lectures. At UIW, the Moody Professor also delivers the Graduation Address in December. The Moody Professor receives a stipend of \$3000 and a faculty development award of \$2000, which may be spent as they designate upon approval of the Provost.

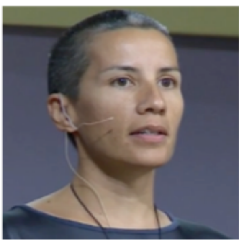


Planning for Succession in Nursing Academia: Why? How?

Dr. Laura R. Muñoz joined the University of the Incarnate Word Ila Faye Miller School of Nursing faculty in 2004, shortly after graduation from the University of Texas Health Science Center at San Antonio with her doctoral degree. Prior to that she worked as a Registered Nurse in the Neonatal Intensive Care Unit for many years and later as a Neonatal Nurse Practitioner caring for newborns in several San Antonio hospitals. She feels privileged to be able to combine her two great areas of interest-nursing and teaching. She believes that she contributes to improving healthcare through her role in nursing education.



Dr. Muñoz has collaborated with faculty across UIW in a number of research projects which have resulted in numerous publications and presentations. Her current research project is on the History of the School of Nursing Over the Past 40 years. Through sharing of information gathered from past faculty, she hopes to chronicle the activities that the nursing school has sustained through the years.



How to be unfaithful to Eurocentric science? Latin American Decolonial Know-How

marcela polanco, mestiza (Indigenous, Africana and European) from Colombia, immigrant in the U.S., is a family and narrative therapist, in English. She is part of the team of graduate faculty members at Our Lady of the Lake University, San Antonio, TX. She leads their family therapy master's program and bilingual training certificate, the Psychological Services for Spanish Speaking Populations (PSSSP).



In Spanish, marcela's work borrows from decolonial practices and ethics of solidarity. She is currently studying Aymara's decolonial thinking and anti-racist feminism with GLEFAS, Grupo Latinoamericano de Estudio, Formación y Acción Feminista. Her interests include the politics of translation/reinvention and training of family therapy practices from English into Spanish, and decolonial relational ontologies from Spanish into English.

Keynote Performer



Martha Mariana Barron Esper (musical name: Mariana Be) is an international student from Mexico. She began writing and composing in English and Spanish from the age of 14. She plays piano, guitar, ukulele, and has been singing ever since she was 5 years old performing at musicals and other events where she has been featured as a vocalist. She has been an active member of school, church choirs and other independent ensembles from a young age and is currently an active member in the music department in both Cardinal chorale and Cardinal Singers who have performed locally and nationally. She is currently a local and internal performer participating in events like the Arts & Music Festival. She had the opportunity of being featured in a song with Latin Grammy winner "Juanes" at the age of 9, and in 2014 performed alongside legendary band "Foreigner".

Mariana's performances and original songs have been awarded in several talent shows including 1st place at the University of Texas at San Antonio Choir Camp talent show in 2014 with her original song "City of lights", which she went on to release as her debut single in 2015 in all music platforms. Mariana is currently seeking a bachelor of arts in international affairs and music. Through her years at UIW she has explored new resources and opportunities such as learning to produce and record in a studio, as well as participating at the 61st Commission on the Status of Women at the U.N. She hopes to combine both international affairs and music to create a more conscious and unified peaceful society world-wide.

Original Songs Performed

- Con Esta Cancion (With this Song)*
- Where is the (LOVE) ?*
- City of Lights*



*Performers from left to Right
Summer Bentley (Cello) , Mariana
Barron-Esper (Vocals and Guitar),
and Jacob Bissell (Percussion)*



FACULTY SERVICE LEARNING

Research Week 

The 2nd Annual Faculty Service Learning Showcase highlights faculty projects on best practices, theories, scholarship, and examples of service learning at UIW.

Research Week 

Pushing the Limits: The Use of Service Learning to Prepare Physical Educators on how to develop and teach lessons focusing on Health in a classroom setting.

Heather Barton-Weston, Dr. Randall Griffiths & Dr. Gregory Soukup

How does your project reflect the mission and core values of the university?

The mission and the Catholic Social Teachings call upon both faculty and students to support each other in the pursuit of educational excellence. Service learning provides the foundation for faculty and students to seek common good by participating in social and community settings.

Proposal Narrative

In 2009, the state of Texas realigned secondary and under graduation requirements that limit student access to health education. Although health is no longer a required credit for students to earn their high school diploma, the state still requires students to meet the Texas Essential Knowledge and Skills (TEKS) for health. This has left school districts all over the state forced to meet the requirements with little to no additional resources dedicated towards the health content.

Naturally, districts turned to what was perceived to be the obvious solution by implementing the health TEKS into the physical education classroom setting. Unfortunately, the miss perception that physical education is the same as health left many physical

educators unprepared to cover content that they did not specialize in. Physical educators found themselves forced to implement content that did not relate to just physical education anymore but instead had to cover content related to body image, substance use and abuse, sex education, and more. This dilemma has forced four-year physical education programs to either graduate unprepared physical educators or to adapt to the needs of their student's new professional requirements. By implementing service learning into the physical education course Principles of Health, students are given the opportunity to serve the young people of the community and have hands-on experience developing health content within a physical education classroom. Ultimately preparing future physical educators to become more efficient in developing and teaching lessons related to health content.

This poster presentation will provide information related to developing a service learning project that meets the needs of both the community and future physical educators. Student reflection and feedback will highlight the overall experience of the activity.

Spanning Past the Single Course: When a Service Learning Project Becomes a Two-Year Coordinated Community Health Education Program for Undergraduate Community Health Education Students.

Heather Barton-Weston, Dr. Ricardo Gonzales, Dr. Erlinda Lopez-Rodriguez, & Ashley Hernandez

How does your project reflect the mission and core values of the university?

Immersed in the Catholic Social Teachings our mission emphasizes the “respectful interaction that advances the discovery of truth, mutual understanding, self-realization, and the common good”. By participating in a service learning project that focuses on developing an 8th to a 9th-grade transitional program emphasizing health, students realize their duty to help enhance the fundamental right of these young people to have a high quality of life.

Proposal Narrative

The transitional period between 8th and 9th grade has been identified as one of the most critical times associated with a student’s academic success. Transitional programs focusing on student health and academic preparation are being implemented in secondary institutions across the state of Texas. Unfortunately, resources for these types of programs are scarce among institutions serving lower socioeconomic students. For these institutions, community collaboration is imperative to enhance the opportunities offered to their student body.

Service learning projects that are implemented in university programs offer secondary institutions

with minimal resources the opportunities to provide similar transitional programs for their young students. Additionally, these service learning projects become an added benefit for university student that is actively participating in the development, implementation, and evaluation of the transitional program. These projects provide university students with firsthand knowledge of the needs these young people face every day. It is through this enlightenment that the university’s Community Health Education students decided to answer the call of continuation for this service learning project. Over the span of 4 semesters, this program became a service learning project that was embedded into three courses and ended as volunteer participation during the final semester the project wrapped up. Through the experience of this service learning project, the Community Health Education students were able to successfully provide a south Texas Title 1 institution with a personalized 8th to 9th-grade student success transitional program. This poster presentation will discuss the process of coordinating an ongoing service learning project that spans across multiple semesters and through multiple program courses. Detailed information pertaining to best practices and student perception will be included.

Lifelong Impact of Service Learning – How Important is Creating Student Experiential Learning Experiences?

Jackson, Chad; PT, DPT, OCS & Mendez, Monica; PT, DPT

How does your project reflect the mission and core values of the university?

Service is a core value of the UIW community and part of the mission is as educators to strive “to educate men and women who will become concerned and enlightened citizens within the global community.” According to our mission, faculty and students should embrace each other in our pursuit of community service and social justice in addition to the other tenets of living our mission. The aim of this platform presentation is to demonstrate the fulfillment of the UIW mission through the lifelong impact of experiential learning experiences on graduates. Additionally, faculty may not realize the impact of creating experiential service projects. Dr. Jackson and Dr. Mendez desire to demonstrate the exponential lifelong impact of faculty efforts.

Proposal Narrative

The impact of faculty facilitating experiential service learning experiences can have an exponential effect on students. Dr. Jackson and Mendez plan to share their story and bring to life the impact graduates have as they leave the university by truly living out the mission of the universities from which they were educated. Faculty may not realize this impact and this presentation will include encouragement to partner with others to create experiential learning opportunities. Additionally, this presentation will include practical tips on ways to create room in courses for experiential learning experiences based on experiences and published literature.

Dr. Jackson attended Creighton University – a leader in physical therapy education rooted in Jesuit values. During his education, he spent four weeks of his professional practice educational experience in the Dominican Republic as part of a university-wide ILAC (Institute for Latin American Concern)

program. Faculty across campus led and engaged alongside students in this experiential learning opportunity. The impact of that learning experience led to Dr. Jackson seeking out multiple service learning opportunities as a clinician including leading a medical and service team to the Dominican Republic in 2012. He and other faculty at the UIW School of PT have helped students facilitate experiential service learning opportunities locally, in Guatemala, Germany, and Mexico. Personally, he engages in service learning with his children casting a vision of how to live in the example of Jesus as He intentionally served others.

Dr. Mendez is a 2017 UIW DPT graduate who first engaged in service learning by volunteering her time with Los Quijotes of San Antonio while she was obtaining her undergraduate education. This organization has volunteers who yearly go to Oaxaca, Mexico and serve the people in the area with health needs. Upon coming to UIW for her physical therapy education, she had a desire to use her professional skills to make a difference in the lives of others both locally and internationally. In 2016, she was selected to go to Oaxaca, Mexico with another DPT student and faculty member where the three of them joined teams from other UIW schools for the annual week-long service trip. With the assistance of Dr. Jackson and the UIW School of Physical Therapy leadership, she was able to create an eight-week long service learning experience to Puebla, Mexico as part of her professional practice educational requirements. This experience fueled her passion for service. Dr. Mendez continues her engagement with Los Quijotes as a professional guiding physical therapy students both from US and Mexico through their service learning experience as she embraces her mission to serve the underserved

How does your project reflect the mission and core values of the university?

The Day of HOPE service-learning project teaches students critical thinking and life-long learning skills, which allows exposure to real world scenarios that do not necessarily reflect a definitive answer. Students often desire a right or wrong answer, which does not reflect how the business environment operates. Additionally, this project enables students to network and collaborate with community members in the San Antonio region. Most importantly, the Day of HOPE educates students on how to become enlightened citizens via community service opportunities, which coincides with the University of the Incarnate Word's mission.

Proposal Narrative

Due to a declining number of accounting majors in recent years, programs are examining methods to increase student interest and further develop individuals' skillset before entrance into the accounting profession. Active learning has gained interest within the accounting field, as research demonstrates that this form of learning contributes to an individual's ability to transfer knowledge from the textbook to the real world (Accounting Education Change Commission, 1990; Bonner, 1999; Davidson, 2017; Healy & McCutcheon, 2008; Yardley-Matwiejczuk, 1997). By linking course material with service learning projects, accounting students gain experience in various sectors and

develop the AICPA's core competencies demanded for the profession.

Each semester, the H-E-B School of Business and Administration (HEBSBA) partners with Calvary, a local nonprofit, to support the Day of HOPE. The Day of HOPE is an opportunity for students and community members to engage in service drives and philanthropic opportunities. This year's Day of HOPE plans to raise money for at least 10 families at a homeless shelter built for women and children. With the help of HEBSBA's accounting students, the project will be a fun and rewarding way for students to experience community service.

A new generation has entered our classroom and will be entering the workforce, Gen Z. Understanding what makes this generation distinctive will help professors fully engage Gen Z students in the classroom, help increase their interest in the accounting profession, and better prepare them for the workforce. Based on the research, Gen Z individuals develop seven unique characteristics: Phigital, Hyper-custom, realistic, Fear of Missing Out, Weconomists, DIY and driven (Stillman and Stillman, 2017). The Day of HOPE Service Learning Project is an excellent tool that not only capitalizes on the unique characteristics of Gen Z students, but also meets the requirements of the AICPA's core competencies.

Building Human Trafficking Research in the Health Care Setting

Dols, Jean Dowling, PhD, RN, NEA-BC, FACHE; Landers, Jacobie, BSN, RN;
Macias, Marisa C., BSN, RN; & Roberts, Latonya, BSN, RN

How does your project reflect the mission and core values of the university?

This service learning project enabled students to gain a greater understanding of human trafficking and its impact on the victims. Watson's Theory of Human Caring emphasizes the importance of a caregiver-victim relationship which enables victims to have open and honest communication in a manner that protects and enhances human dignity further enabling health professionals to implement UIW's mission of service.

Proposal Narrative

At the University of the Incarnate Word, service learning was implemented in a graduate nursing research course by a team of three students under the guidance of faculty. The students investigated publically available information regarding human trafficking and analyzed completed research studies on the topic. Recognizing that Texas has the 2nd highest number of trafficking cases in the US with 473 reported cases in 2016 (HHS, 2016), these students, completing their doctorate in nursing practice, realized that research related to human trafficking would directly impact their clinical practice.

The students developed a research proposal. The proposal defined the problem of human trafficking, the types of victims, the health problems occurring in human trafficking victims, and methods of identifying human slavery and trafficking victims. The students selected a Trafficking Victim Identification Tool and proposed training of health care professionals to increase their ability to identify, refer, and treat human trafficking victims. The underlying theoretical framework chosen for the study was Jean Watson's Theory of Human Caring/Caring Science which emphasizes that the healthcare professional's genuine caring establishes a caregiver-victim relationship enabling victims to have open and honest communication in a manner that protects and enhances human dignity. This caring relationship provides a foundation enabling

the victim to share private confidences and connect human to human.

The students' final research proposal was to educate health care professionals and implement the use of the selected victim identification tool in one emergency room. The hypothesis was: Education and Training regarding the administration of the TVIT created by the Vera Institute of Justice (2014) will allow emergency center health care professionals to appropriately identify, treat, and refer human trafficking victims.

The students presented their proposal to the entire doctoral nurse practitioner research course. The students hearing the presentation gained an understanding of the complexity of human slavery and trafficking and were able to envision the methods by which they could recognize these victims in their future practice settings and identify methods of assisting the victims. The students asked a wide range of questions and broadened their understanding of the issue.

One of the students, based on the knowledge gained through their work on this research proposal, identified several human trafficking victims at the low-income clinic where they are in clinical practice. The wide variety of individuals who may be trafficked was of concern to these future NPs as identification of and assistance to victims is difficult. Assistance is limited in San Antonio and when assistance is available it is dedicated to serving only children and females.

Providing a challenging service learning issue for research proposal development in a graduate research course increases the students' depth of understanding of the topic, its complexity, and drives the development of solutions to improving an aspect of the issue. Frequent guidance and analysis of their work helps the students to develop a proposal that heightens the understanding of the entire class.

Engaging Students on the Critical Issues of Human Slavery and Trafficking: A panel of faculty who participated in a grant program

Sister Martha Ann Kirk, Th D.

How does your project reflect the mission and core values of the university?

The Incarnate Word Sisters' Constitutions speak of bringing God's love "through the promotion of human dignity." The founders of the university "were motivated by the love of God and their recognition of God's presence in each person." Our faculty conversations on human slavery and trafficking led us to information, methods, and then engagement of our students through research, writing, advocacy, and/or service projects.

Proposal Narrative

Since the Incarnate Word Sisters have taken a corporate stance against human slavery and trafficking <http://www.amormeus.org/en/justice-peace-and-integrity-of-creation/#justiciapaz-denuncia>, we sought and obtained a grant from the Lilly's Fellows Program in Humanities and the Arts called "Conversations on Service Learning and Engaged Scholarship Considering the Mission of the Incarnate Word Founders to the Vulnerable." The corporate stance emphasizes a commitment to research, education, advocacy, and action against human trafficking.

The Incarnate Word Sisters' Constitutions speak of bringing God's love "through the promotion of human dignity." The founders of the university "were motivated by the love of God and their recognition of God's presence in each person." Our faculty conversations led us to information, methods, and then engagement of our students through research, writing, advocacy, and/or service projects.

Since our university has grown rapidly and most communication takes place in different schools or collages, the first benefit of the grant was building friendship and a sense of community among faculty from Business, Communication Arts, Education, Fashion Management, Interior Design, Nursing, Physical Therapy, Psychology, Religious Studies, and Spanish. Participating faculty included: Melinda

K. Adams, Diana L. Allison, Danielle J Alsandor, Adrienne Ambrose, Debora Z. Kaliski, Jean D. Dols, Dora E. Fitzgerald, Valerie Greenberg, Robert J. Martinez, Delia Meyer, Alicia Rodriguez de Rubio, Gabriel Saxton-Ruiz, Karen Weis and Kelly Z. Daughtry of St. Anthony Catholic High School.

Though many faculty began as strangers to each other, the conversations provided an atmosphere in which they became comfortable enough to share deep feelings of compassion for those caught in trafficking, strong desires to motivate students to ethical action, and statements of how faith can give strength and courage beyond ourselves to confront these challenges. While only two of us were from the Religious Studies Department, many of the faculty beautifully framed our work in theology and spirituality: our community MUST research, learn, and act because we are "of the Incarnate Word." God's compassion has come to earth, has taken flesh. Faculty held the university mission statement "to educate men and women who will become concerned and enlightened citizens" as a serious responsibility.

Not only did people share in person, but also through a public blog "Speaking for Human Dignity, Standing Against Human Slavery." <http://speakingforhumandignity.blogspot.com/>

The presentation will include many examples of the types of service that students did raising awareness about this critical issues. Faculty created curriculum and resources which can continue to be used. Student posters continue to be used. Faculty and others are continuing to use both the blog <http://speakingforhumandignity.blogspot.com/> and the Library Guide with resources.

The faculty had opportunities to reflect on and speak about their commitment to those who are suffering in the world and how we as a faith-based school must respond. Their compassion stimulated a high level of student engagement.

How does your project reflect the mission and core values of the university?

Often to accomplish service resources are needed. Catholic Social Teaching values solidarity, working together. This session considers uniting that good may be done.

Proposal Narrative:

Many agencies, foundations, and organizations which give grants require or suggest that service learning be a component of the program. Government grants in particular want students to

develop civic engagement. This presentation will be a conversation between faculty and administrators in both Humanities and the Sciences on the importance of service learning in grant programs. Examples of service learning in present and in past grants will be considered. For the last two years the Ettlign Center for Civic Leadership has had two small grants that have promoted service learning. Also some information on how to search for grants in support of service learning projects will be shared.

How does your project reflect the mission and core values of the university?

Through this service learning project, my students are engaged in the community as agents of social justice and social change to prevent the continuation of human trafficking. Although the students are most immediately members of the UIW community, they have reported increased awareness of their position as global citizens in the fight against human trafficking. Most importantly, the students have an internal sense of empowerment through their community service, knowing that they impacted children's awareness to avoid dangerous situations. The CCVI corporate stance draws a hardline against human trafficking, where they "[affirmed] the dignity and rights of all people and denounce human trafficking and the economic and social systems that promote it."

Proposal Narrative

PURPOSE:

The intent of my service-learning poster will be 1) to inform attendees about the importance of human trafficking awareness and 2) to share one example of a model of incorporating service through an impactful and flexible approach.

IMPORTANCE:

According to FreedomYouthProject.com, nine of ten victims of human trafficking in the U.S. are native-born Americans, and the rescue rate is half of one percent! Myths and stereotypes continue to complicate society's ability to fully prevent human trafficking. The key to intervening in this global crisis is to educate communities about the warning signs.

PROJECT BACKGROUND:

During Fall 2017, students in my Multicultural Issues course (Psychology) completed a service learning project focused on the prevention of human trafficking. We worked closely with a local organization called Freedom Youth Project (FYP). FYP educates law enforcement agencies, community organizations, religion-based groups, schools, parents, and children to prevent human trafficking. Together, we aim to "empower youth to become difficult targets" (Saul Castellanos, FYP CEO). After speaking with the CEO, he arranged for my class to participate

in building the news media database frequently used to create and inform local, regional, and national trainings.

TASK:

Twenty-four students participated in the service project during the semester. In the beginning, each student registered as an FYP volunteer and completed a short online training webinar about the service task. Then, the students completed the following evaluation task three times during the semester: FYP emailed each student multiple media links, accompanied by an evaluation survey. The students click on the media link to read an article; each article is evaluated through an online survey link. The articles were evaluated for 22 categories of information (e.g., demographics, victim status, perpetrator status, story details, etc.). Students received 10 days to complete the readings and evaluations of their media. Overall, students will read and review at least 220 articles. All data will be collected by the end of Fall 2017.

RESULTS & CONCLUSION:

Data collection is ongoing, but, as a class, they will have served over 130 hours of community service hours by December 2017. After two rounds of student reflections, the results have shown an increase in awareness of human trafficking, including the types of victims, deception strategies, and recovery stories. This has been a truly impactful experience. One student summarized it best: "I think that this work has so much value in keeping people in the know and I'm so glad that I'm able to be a part of it." The remaining data will be collected and summarized from the third round of reflections and through individual final oral presentations.

To produce effective community trainings, it is critical that the organization's media database reflects the most current information. With new reports coming in every day, it is vital that children and their parents have access to up-to-date trainings. The article evaluations completed by the students allow FYP to successfully help children to earn their Ph.D. in manipulation detection!

How does your project reflect the mission and core values of the university?

Years ago I researched, developed, and then carried out a novel plan for a course called Applied Ethics at UIW. The most significant feature of this innovation was simply taking the course title seriously. Just as things are at most other universities, the Philosophy Department at UIW distributes ethical theory and ethical application into two distinct courses, where the former is called simply Ethics and the latter Applied Ethics, which directs concepts about right and wrong toward specific problems in law, science, medicine, sports, and so on. What is almost universally missing in such courses, both here at UIW and elsewhere, is an application of oneself. Duh. The mission and core values of UIW include an emphasis on the education of the whole person, which in turn includes the person as an agent in the world. The very origins of Incarnate Word, famously, can be traced to a series of compassionate actions that aimed at the discovery, understanding, and amelioration of suffering. My inspiration to revise and present the Applied Ethics course as a service-learning course arose from a solemn meditation on what it means to teach such a subject while honoring the active moral and spiritual nature of the whole person.

Proposal Narrative:

In October of 2003 I attended a vast workshop entitled “Catholic Social Thought across the Curriculum.” I traveled to the University of St.

Thomas in Minneapolis with Dr. Bob Connelly, who was my roommate for this great occasion. As we divvied up our choices to attend the widest range of breakout sessions, I believe it was on Bob’s recommendation that I attended a session on service-learning. I pledged to spend some time researching and developing a service-learning course for the Fall semester of 2004. The Summer was key. I used that time to visit various community partners, settling on seven to work into the course. Each of these would give opportunities to enrich conversations about conventional topics and problems in ethics with students’ experiences of service. For example, it’s one thing to have a classroom conversation about the scope and limits of compassion for a stranger, and it’s another thing entirely to have that same conversation, in the classroom, with four students who have been serving food at the Catholic Worker House for several weeks. The most salient criterion question for understanding the essence of service-learning is simply this: will the conversations you cultivate in teaching a given subject be leavened for the better by students having a concurrent experience of community service and civic engagement? If the answer is yes, then the practice is rightly understood to be service-learning. I propose a podium presentation on my experience developing and teaching this course for several years, and in the spirit of the very enterprise I am describing, I will use the occasion to announce the imminent return of this course, in Fall 2018

How does your project reflect the mission and core values of the university?

This project reflects the mission and core values of the university as it investigates our students' reactions to service-learning, which covers a number of UIW values. While the objective of service-learning projects is to contribute to the development of concerned and enlightened citizens, a key aim of the mission of UIW (Education; in the context of Service and Faith), the concern for how our students are responding to such projects is also aligned with the mission. Asking the question of how our students are reacting to this type of learning experience is consistent with the core value of Truth. The assessment of service-learning as a pedagogical practice reflects our concern that these are positive experiences for our students, so any adjustments can be made to make service-learning beneficial to all involved.

Proposal Narrative

Purpose of the Study: The current study was an exploratory study conducted to begin to investigate some potential predictors of student receptiveness toward service-learning. While our objective as faculty administrators of service-learning projects is to contribute to the development of concerned and enlightened citizens, our students' reactions to this type of learning should also be considered in order to make it a positive experience for all involved.

Rationale and Significance: Service-learning is an experiential learning strategy that is being advocated widely by various institutes of higher learning, both religiously-affiliated (e.g., DePaul, Loyola, Villanova, the University of the Incarnate Word) as well as public (e.g., Montana State University, the University of Texas at San Antonio, Binghamton University). Although the literature on the efficacy of service-learning is growing (e.g., Reinders & Youniss, 2009; Celio, Durlak, & Dymnicki, 2011; Weiler et al., 2013; Desmond, Stahl, & Graham, 2011), it would be helpful to know more about whether there are certain types of students who are more (or less) receptive to service-learning in their undergraduate experience.

Description of Methodology

A single section of a Social Psychology course requiring a service-learning project was surveyed for this study (n=22). After the project was explained, students were asked to indicate their reactions to the upcoming service-learning project (Overall Service-learning Project; OSLP) and the Service Component of the project, specifically (SC) in a modified version of the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988). Personality factors were assessed with the BFI-10 (Rammstedt & John, 2008), values related to moral concerns with the Moral Foundations Questionnaire-30 (Graham, Haidt, & Nosek, 2008), and various demographic variables were assessed (e.g., age, ethnicity, religious affiliation, conservatism/liberalism).

Findings and Conclusions

Stepwise multiple regression performed for Positive and Negative Affect scores for the Overall Service-learning Project and the Service Component yielded significant models for Positive Affect for both the Overall Service-learning Project as well as the Service Component, with MFQ-Harm subscale being the only significant predictor. The MFQ-Authority subscale significantly predicted Negative Affect for the Service Component. Examining BFI variables, only Extraversion was a significant predictor, of Positive Affect for both Overall Service-learning Project and the Service Component. The only significant demographic predictors were ethnicity and liberalism. Students who identified as Hispanic indicated significantly more Positive Affect (for both the Overall Service-learning Project and the Service Component) than self-identified White students; higher endorsement of liberalism predicted more Positive Affect toward the Service Component. More research with a larger sample will illuminate the extent to which personality traits and values predispose students to be more or less receptive to service-learning. Additionally, variables such as degree of intrinsic religiosity warrant examination. As service-learning is increasingly incorporated into the curriculum, identification of potential barriers to success could ease both students' and instructors' foray into the service-learning experience.

(re)Formation, a Documentary Film Passionately Advocating Service and a Conversation with UIW Theatre Graduates and Faculty

Margaret Mitchell, Jose Ruben De Leon, Shannon Ivey, Shelly Chase, & Renee Gravens
Facilitated by Sr. Martha Ann Kirk

How does your project reflect the mission and core values of the university?

As UIW celebrates the SA Tricentennial remembering that in the 1860's when people were suffering, Sisters compassionately and creatively responded to the sick, then to orphans, and then to the uneducated, UIW Theatre graduates are compassionately and creatively responding in the face of the suffering of vulnerable today. UIW education in service and social justice has long lasting effects.

Proposal Narrative

Many academic studies endeavor to track if student service and formation in social justice has long lasting efficacy. Empathy is one of the goals of service learning. Education in Theatre Arts can be explored as a pathway to empathy. Theatre Arts promote imagination and creativity. In theatre one does the impossible, one creates out of nothing, one is not confined by limits.

See (re)Formation, a new documentary film created by UIW Theatre Arts students from about twenty years ago. Enter into a conversation with Theatre Arts faculty Margaret Mitchell, Religious Studies Adjunct faculty Jose Ruben De Leon who is also a Theatre Arts graduate (UIW BA 1998), and Shannon Ivey (UIW BA, 2000), Shelly Chase (UIW BA, 1999), and Renee Gravens (UIW ME, 2013) who created the passionate documentary. Learn of amazing things done by these graduates. What can be learned so that UIW education today can form current students to be compassionate, enlightened and engaged citizens as they are?

Margaret Mitchell, a Theatre Arts professor was an early recipient of the UIW Edward Zlotkowski Faculty Service Learning Award a year after it was instituted in 2003. Jose Ruben De Leon, adjunct Religious Studies faculty and award-winning actor, singer, and playwright began developing in his moving "one-man dramas" with a performance of

Mark's Gospel. Both he and his students overlap theatre and service work nourishing the spirit as much as feeding the hungry nourishes the body.

For years Ivey and Chase have been concerned about social justice issues and have done research and advocacy. Ivey formally founded Theatre for Change in 2013 which has focused on adoption, childhood cancer, the foster system, and immigration <http://www.theatreforchange.org/> Ivey, is a faculty member at Texas Luthern University and the mother of two foster children. The film begins remembering Martin Luther and putting forth a challenge: as the 500th anniversary of the Reformation is being celebrated, can people remember that the church is always in need of reform? A recent Texas Public Radio story <http://tpr.org/post/filmmaker-calls-new-reformation> on the film asks why don't Christians get out of church buildings into the streets and help people more. Why is there not more compassionate care for foster children? The film points out "There are 2.5 churches for every foster child in South Texas' Region 8 foster system." See a trailer of the film (re)Formation: <https://vimeo.com/241027881>

Chase invited Renee Gravens who works with foster children in the Roy Mass Youth Alternatives program <http://www.rmya.org/> to speak to the China Grove Lions Club to which Chase belongs. With the support of the Lions Club, Chase got initial funds to do interior decoration for houses for foster children making them feel more like homes. Chase volunteers extensively to improve conditions for foster children.

As UIW celebrates the SA Tricentennial remembering that in the 1860's when people were suffering, Sisters compassionately and creatively responded to the sick, then to orphans, and then to the uneducated, UIW Theatre graduates are compassionately and creatively responding in the face of suffering today.

How does your project reflect the mission and core values of the university?

Service to the community is one of the fundamental values of the UIW mission; so too is education. Bringing the two together through the process of service-learning or community engagement projects is one very effective method of engaging students and helping them cultivate not only the knowledge but also the affect one would like to see in a UIW graduate who is an engaged citizen of the world. Members of the Service-Learning Committee at UIW are currently trying to increase awareness among faculty of both the rewards of service-learning and the opportunities available for such activities. My project will hopefully support this effort by offering some insights I have gleaned from my year-long participation in a Wabash Center for Teaching and Learning in Religion and Theology workshop on “Pedagogies of Community Engagement.”

Proposal Narrative

The Wabash workshop I attended consisted of 1 week in June of 2016, 4 days in January 2017, and a final week in June 2017. I was exposed to a plethora of ideas concerning community engagement, numerous pedagogical theories, and a variety of

practical actions comprising service-learning and/or community engagement projects. Two ideas, however, stood out and are what I would like to explore in my presentation. The first is the idea that care and concern for social justice and community are ultimately based on a concern for persons with whom we are in relationship; therefore, relationship-building skills, ideally, would be an explicit component of a service-learning course. There are a variety of ways in which this can be done, and I will explore a few, such as “deep listening” strategies and elements of civil discourse. The second concept is that of trying to cultivate empathy within students. If social justice and community are based on relationships, we must learn to cultivate empathy for those from whom we differ. Hence, I will explore a variety of ways in which this can (theoretically) be done, such as imagining other worlds and practicing an ethic of care. If we hope our students will become life-long learners and continue to be active participants in their local and more global communities once they graduate, it is not enough to simply have them “do service.” Rather, we will most likely need to promote an affective change—cultivate empathy—within them that will remain past their graduation day and far into their futures.

How does your project reflect the mission and core values of the university?

Students are taught to show compassion, empathy and love towards our fellow human beings. As the students of the Promotional Strategies I class reflected on the month of October, Breast Cancer Awareness, they recalled family, friends and loved ones that had been affected by breast cancer. They designed a bra to commemorate an individual that had been impacted by cancer. They celebrated feelings of victory, suffering, love and sadness as they designed and constructed the bras.

Proposal Narrative

This is a PowerPoint Presentation with text and photographs. If it does not copy, let me know and I will send via another medium.

Breast cancer through our eyes

Students from the Fall 2014 Promotional Strategies Class were challenged to reflect on “How Breast Cancer had impacted their lives. Some students had been affected by breast cancer through their family members, a friend, a mother, or a grandmother. Some were survivors and others were victims of breast cancer. Other students were indirectly influenced by media and health alerts. Regardless of the circumstances, the students agreed that Breast Cancer must be celebrated by the living and the deceased to bring awareness to the need for a CURE.

13 photos follow in PowerPoint

“OUR PRAYERS ARE WITH YOU”

by
Taryn Olivo

“ It is in our deepest darkest moments of sickness that we are compelled to recognize that we are not alone. When a woman is diagnosed with breast cancer it is not only her that suffers through it, but

every loved one in her life as well. An act of love that immediately follows is that of prayer. From those who believe in a higher power and those who do not. Prayer is a universal language for seeking healing and answers. When you suffer through unbearable chemo treatments, loss of hair, and your body is barely hanging on it is the overwhelming love and hope from selfless prayers that somehow get you through another day.” 2014

BREAST CANCER FACTS

Goal of the Susan G. Komen Association is to reduce the current number of breast cancer deaths by 50% in the U. S. by 2026

1 in 8 women in the U.S. will be diagnosed with breast cancer in her lifetime.

In 2017, it's estimated that among U.S. women there will be 252,710 new cases of invasive breast cancer and 40,610 breast cancer deaths

*American Cancer Society. Cancer Facts and Figures 2017. Atlanta, GA: American Cancer Society, 2017.
Updated 10/16/17

Healthy Lifestyle choices to lower risk of different types of cancer and other health conditions

Be physically active
Achieve and maintain a healthy weight
Eat at least 2 ½ cups of fruits and vegetables every day
Choose 100 percent whole grain foods
Limit red meat and processed meat. Choose chicken, fish or beans more often
Limit "bad" fats (saturated and trans fats)
Eat "good" fats (polyunsaturated and monounsaturated fats)
Limit alcohol to less than 1 drink a day for women and fewer than 2 drinks a day for men

* Adapted from the American Cancer Society's Nutrition and Physical Activity Guidelines references

<https://ww5.komen.org>

Mission Life: A platform for student innovation in the development of products or services that address needs of communities

Marcos A. Oliveira

How does your project reflect the mission and core values of the university?

We have developed a platform where teams of students compete for the development of innovative ideas for products and services that addresses "real world needs of communities, our planet or animals". Students develop the proposals grounded on scientific principles and their evaluation are based on criteria that include civic engagement, social inclusion and sustainability. The experience we developed provide an environment where students work as teams in the development of proposals that support them to become "concerned and enlightened citizens within a global community". Furthermore the focus on team work and the scientific method means that "students support each other in the search for and communication of truth, thoughtful innovation, care of the environment, community service, and social justice."³

Proposal Narrative

We have developed a platform where teams of students develop ideas/concepts for products and services. These teams then compete for the ideas or concepts that address real world needs of communities "see a need fill a need". Currently this experience is being designed so that students can add this experience to their co-curricular transcript. This competition is also an international since it includes students from UIW and a sister university compete for the most innovative, socially inclusive and civically engaged innovation.

The Feik School of Pharmacy participated in this event for the first time in the fall of 2015. In 2015 Feik School of Pharmacy students developed a concept for a project that involved filling a need for diabetes patients. Students developed App that monitored diabetes patient's medication and habits and also included a carrying case that contained medication for patients. In 2016 UIW-Feik School of Pharmacy joined the completion which included Kent State University and Pontifical Catholic University of Parana (PUCPR).

Description of the platform

Student Eligibility

*professional students may participate along with

approved partners.

*Participating teams are required to submit a brief abstract indicating their project Abstracts.

*All research, scholarly work, or creative activity must be completed in collaboration with a faculty mentor or Mission Life Coordinator

Full proposal submission & Evaluation Criteria

Written Report components: Title page (Project name, participant names, school name and logo); Table of contents; Introduction; Statement of problem; Objective; Product description; Budget and finance; Conclusion and references.

Poster - Measurements should be no larger than 36x48, and include: UIW logo, title of project, name(s) of author(s) including faculty mentor; Introduction; Statement of the problem; Objective; Project description addressing evaluation criteria below

Video Oral Presentation - 10 minutes maximum length. Video - You have your own equipment; program coordinator will assist

Evaluation criteria for full proposal local evaluation and International evaluation: Social Inclusion: global reach; Innovation and originality; Financial, structural, operational and cost-benefit feasibility; Sustainability: balance with respect to environmental resources; Technical viability according to the present reality and to the present regulations; Multidisciplinary; Civic engagement and human values: social benefits and respect to individuality; Quality of written proposal; Quality of the poster session; Quality of the oral presentation.

A score from zero to ten will be granted to each evaluation criteria and a final score will be obtained by the arithmetic average of all scores granted to each team. If a tie occurs, the tiebreaker will be the highest score in the criteria "Civic Engagement and Human Values". If the tie persists, the team with the highest score in the "Innovation and Originality" criteria will be declared winner.

The Impact of a Service Learning Course on BSN Nursing Students

Davila, Yvonne MSN RN CNE & Richardson, Cynthia MSN RN CNE

How does your project reflect the mission and core values of the university?

Promoting transformational learning experiences through service learning and community health promotion and disease prevention is the focus of the nursing service learning course. In keeping with the mission of the Sisters of Charity and the University of the Incarnate Word, our service efforts respond to the priority health concerns of our communities, especially those who are most vulnerable to disparities in health care. Students demonstrate a commitment and compassion to strive to alleviate suffering and promote social justice.

Each student selects a UIW mission tenet and a Catholic Social Teaching statement and connects it to their service learning experience.

Proposal Narrative

The Health Promotion and Disease Prevention course was designated as a service learning course in 2015; however, the participation at Haven for Hope has been ongoing since 2010. Nursing students participate in 16 hours of clinical at Haven for Hope Courtyard and Child Care Center. The students perform foot care, immunizations, health screenings, needs assessments and teaching projects.

At the end of each semester, students reflect on how their clinical experiences relate to service learning.

Some key words students selected include: compassionate, meaningful, transforming, humbling, and fulfilling.

Students also selected key words to describe how their clinical experiences were related to civic responsibilities. Some key words included were cultural competence, partnership, active in community, concern for others, challenging, and common good.

Students also described how their service learning clinical experiences connect to their future as a nurse:

“Each and every one these experiences in the community have provided me with a different perspective and have allowed me to better understand their needs. Gaining these different perspectives, hardships, and goals has given me the power and opportunity to make a difference in their lives as a healthcare provider. This clinical rotation has opened my eyes in a whole new way; every person is beautiful no matter their past or current situation. As a future nurse I want to always emphasize the positive and ensure that every patient I come across feels worthy and respected.”

“This clinical has drastically opened my eyes to many different patient populations that I may not otherwise have had the opportunity to work with. It has imprinted the importance of serving our community whether it is through a primary care job or through service outside of work. As a future nurse I want to pay it forward to my community and help the future generations of this world through health education and promotion.”

“I have a greater appreciation for everyone in our community and will take the humbling experience with me on my future endeavors.”

“I gained so much respect for these people by hearing their stories and how they are dealing with their struggles. You do not have to travel far to make a difference.”

“This clinical experience has shown me the impact that nurses can make in the community and has motivated me to continue to seek service opportunities in my career. Making an effort to close the gap in healthcare for the underserved populations in our community reminds me of why I wanted to become a nurse.”

This service learning course not only impacts the nursing students, but also positively impacts the clients, populations, and communities we serve. The goal is to help students continue to make a difference in the community and in the world.



COLLEGE OF HUMANITIES, ARTS AND SOCIAL SCIENCES

Research Week 

The College of Humanities, Arts and Social Sciences (CHASS) provides a well-rounded liberal arts education for undergraduates through its core curriculum courses and degree programs.

CHASS courses provide considerable opportunities for students to broaden their skills in critical thinking, problem-solving, oral and written communications, and understanding of the human experience. As part of the curriculum, students participate in research and study abroad, international internships, and course-based travel.

How does your research or creative work reflect the mission and core values of the university?

Education is a core value of the UIW Mission. However, individual differences in personality and social relationships influence educational processes. This study investigated variables that may influence college students' learning; specifically, it investigated how motivation for learning and perceptions of social relationships interrelate with academic attitudes. When the relationships between these individual differences are better known, it may be possible to modify them to enhance future learning.

Purpose of the Study

This study investigated the relationship between fear of missing out (FOMO), academic motivation (extrinsic, amotivation, and intrinsic), and academic entitlement (AE) (entitled expectations, externalized responsibility). FOMO is worry that "others are having fun without me" (Przybylski et al., 2013). Alt (2015) found that FOMO is related to two forms of academic motivation: extrinsic (motivation for positive external academic outcomes such as good grades) and amotivation (disinterest in academics). This suggests that FOMO may also be related to AE; AE includes entitled expectations (e.g., "I deserve an A") coupled with externalized responsibility for academic outcomes (e.g., "It is the professor's responsibility that I make an A") (Chowning & Campbell, 2009).

Rationale and Significance

Given that those high in FOMO tend to be motivated by external academic outcomes and feel disinterested in academics, this suggests low enthusiasm for learning, or intrinsic motivation (Alt, 2015). Disinterest in academics coupled with motivation to obtain positive external academic outcomes suggests that these individuals may expect good grades in the absence of effort to produce those grades. This suggests that FOMO may be related to AE; AE is the expectation of academic success without personal responsibility for that success. Given that both FOMO and AE

involve comparison of the self to others (i.e., social comparison), it is likely that they are related. However, there is no extant literature exploring the relationship between these two types of social comparison.

Description of Methodology

Participants were 120 (53% female, average age=21.43) undergraduates recruited via a western university's psychology participant pool. Following informed consent, participants completed study measures. We used a 10-item measure of FOMO, (Przybylski et al., 2013), a 12-item measure of academic motivation (intrinsic, extrinsic, amotivation; Vallerand et al., 1993), and a 15-item measure of AE (externalized responsibility, entitled expectations; Chowning & Campbell, 2009). All measures used a 7-point, Likert-type response scale. Participants also completed a demographic questionnaire. Data collection occurred online via Qualtrics; the study was IRB-approved.

Findings and Conclusions

FOMO was significantly related to both facets of AE, externalized responsibility and entitled expectations. Additionally, FOMO was also related to academic amotivation after controlling for other variables. This indicates that those with greater worry that "everyone may be having fun without them" reported lower personal responsibility for their academic success and lower personal drive or investment in academics. Despite their lower responsibility for and investment in academic success, they reported more entitled beliefs about that success; they were more likely to perceive that academic success should be granted to them. Because both AE and FOMO involve social comparison, their relationship suggests that those who place greater emphasis on social comparison may perceive positive academic outcomes as another way to be part of a social group. This also suggests the need for future research about need for social acceptance's relationships with FOMO and AE.

How does your research or creative work reflect the mission and core values of the university?

Social justice is an issue that is central to the mission of UIW. Investigating how others are attending to issues of social justice in their curriculum is an important question. We seek not only to educate UIW's students while they are here, but to understand the broader educational landscape those in their cohort are experiencing. As we want to educate our students to be informed and enlightened citizens of the world, an awareness of the state of the world beyond UIW's walls is important.

Purpose of the Study

Social psychology course syllabi posted as part of Project Syllabus on the Society for the Teaching of Psychology (STP) website were examined for explicit mention of projects or course outcomes indicating a concern for social justice issues.

Rationale and Significance

Consistent with the mission of UIW, an important consideration of the field of social psychology is social justice, or the concern for the welfare of all in society. For example, the Social Psychology Network states: "The mission of Social Psychology Network is to promote peace, social justice, and sustainable living through public education, research, and the advancement of psychology". If social justice is an important concern in social psychology, how many of us in the field are involving social justice objectives or projects in our course designs? To begin to answer this question, the present study examined social psychology course syllabi posted as part of Project Syllabus on the Society for the Teaching of Psychology (STP) website for evidence of a concern for social justice issues.

Description of Methodology

Undergraduate-level syllabi for Social Psychology-related courses on STP's Project Syllabus website were examined for: 1) course objectives, and/or 2) specific projects requiring student examination of social justice issues. Of the 20 undergraduate syllabi posted under the "Social Psychology" category of STP's website, 8 covered general Social Psychology courses while the remaining syllabi were for more specialized social psychology courses (i.e., Prejudice and Discrimination, Group Processes, Social Influences and Persuasion). Either an explicit mention of "social justice" or a more general allusion to an analysis of social issues with a goal of social justice was noted.

Findings and Conclusions

Of the 20 syllabi posted, only 4 (20%) included a project that was clearly social-justice-oriented (a project addressing the inequality of groups in society and how social psychological principles may rectify that inequality). The remaining 16 (80%) did not explicitly mention either a course objective or a specific course project addressing issues of social justice. Although most social psychology courses will naturally address issues related to social justice in the course content, explicit mention of social justice was not common among the STP Project Syllabus social psychology syllabi. The present analysis suggests that the syllabi people often consult as models may not directly communicate the importance of these principles in the curriculum. As the sample for the current study was very small, a wider net should be cast to determine the actual prevalence of social justice principles in undergraduate psychology curriculum in future study.

How does your research or creative work reflect the mission and core values of the university?

Our research addresses innovation and components of social justice through applying unique methodology to study the development of social evaluations that may contribute to differential treatment of others. Fair treatment of others is complicated by human tendency to automatically evaluate based on appearance. To understand the mechanisms underlying the development of appearance based stereotypes that can lead to discrimination or preferential treatment, researchers must consider the earliest manifestations of those stereotypes—evaluation of novel social partners as positive resulting in approach motivation or negative resulting in avoidance motivation. The innovation of our research is the novel application of EEG asymmetry to compare evaluations of appearance and social behaviors, and how those variables relate to such individual characteristics as temperament and social experience.

Purpose of the Study

We evaluate social partners based on appearance and behavior. Often these preferences are studied differently depending on the age and ability of the participants (e.g., ratings for adults; choice for children; looking time for infants). Different methods make it difficult to map developmental progression and individual differences in evaluation. The purpose of the current study was to use a single method to assess neural correlates in evaluation of social behaviors from 6-months to 6-years.

Rationale and Significance

Infants show preference—through touch or longer looking time—for characters that perform positive behaviors compared to negative behaviors (Hamlin et al., 2007, 2010; Kuhlmeier et al., 2003). Frontal EEG asymmetry in the alpha band relates to approach/avoidance motivation in the frontal regions (F3/F4) as early as infancy with greater left than right activation relating to approach motivation—positive evaluation—and greater right than left activation relating to avoidance motivation—negative evaluation (see Coan & Allen, 2004). Infant frontal EEG asymmetry differentiates between social stimuli evaluated as positive and negative such as attractive and unattractive faces (Taylor-Partridge, 2009), suggesting this method may be appropriate for consistently measuring evaluation social behavior as well. This project is significant because to understand the development of appearance based

stereotypes that can lead to discrimination or preferential treatment, researchers should consider the earliest manifestations of those stereotypes.

Description of Methodology

Participants (11 females & 12 males ages 6-months to 6-years) viewed computer animated videos of agents (i.e., square & triangle) performing positive or negative behaviors toward the target (i.e., a circle). Each of the four action sets, participants viewed a static image of the positive and the negative agent for 5 seconds each time (20 seconds total per agent).

EEG data was acquired from F3 (mid-frontal left) and F4 (mid-frontal right) and referenced to CZ using Biosemi Active Two 32-channel system (Biosemi Inc., Amsterdam, The Netherlands). Infants wore a headcap with Biosemi Active Ag/AgCl sintered electrodes position according to the 10-20 system (Jasper, 1958). After applying fast Fourier transform (FFT) to artifact-free epochs for each condition to compute raw power in the infant alpha band (6 to 9Hz), we calculated the EEG asymmetry index [$\ln(F4) - \ln(F3)$] for each video type and each static image type (positive vs. negative). Alpha power is inversely related to activation, thus a positive EEG asymmetry index indicates greater activation in the left frontal region compared to the right frontal region and vice versa. We analyzed the data using paired sample t-test to compare EEG for the positive behaving image versus the negative behaving image.

Findings and Conclusions

A paired sample t-test resulted in a significant difference between EEG asymmetry indices for the positive agent versus negative agent. Infants showed greater left asymmetry when infants viewed the static image of the positive character (mean = .04, SD = .14) compared to the static image of the negative character (mean = -.04, SD = .18), $t(22) = 2.63$, $p = .015$, $r = .49$. Results suggest that infants and children evaluate animated characters based on their behaviors. From 6-months to 6-years, EEG asymmetry patterns in response to static images suggest that participants prefer to approach characters that perform positive actions compared to characters that perform negative actions toward the target. These results support the use of EEG asymmetry as a consistent measure of neural correlates in evaluation of social behavior—opening up avenues for future research into the development of social perception, evaluation, and stereotypes from infancy into childhood.

How does your research or creative work reflect the mission and core values of the university?

The overall goal with this type of research is to understand why some language learners are more successful than others. As about one third to a half of our Spanish students are heritage students, this study can have a direct impact on our own student body here at UIW. If we know what our heritage students think about learning a foreign language, we can discuss with them some of their misconceptions that may hinder or prevent them from further learning the Spanish language. Thus, the ultimate goal of this study is to help our heritage students – indeed, all of our language students – be more successful in the language classroom, thus supporting the university’s mission “to educate men and women who will become concerned and enlightened citizens within the global community.”

Purpose of the Study

The purpose of this study was to investigate the beliefs of Spanish heritage students about learning a foreign language. Because these students come to the class already with some knowledge of the language and culture being studied, it is an interesting question if they will have similar or different beliefs than traditional language learners. The presentation will include implications for teaching and recommendations for future research.

Rationale and Significance

Foreign language learning is a complex process in which learner contributions play a central role (Nyikos & Oxford, 1993). Much research has emphasized the important role that beliefs can play in the foreign language classroom. Students’ beliefs about language learning have the potential to affect learning behavior and can ultimately determine the

outcomes of the learning experience (Horwitz, 1988). These beliefs are important because if they are wrong, they can be real barriers to learning the second language. Much research has been conducted to examine how beginning language students believe a foreign language is learned. However, this research has not yet been conducted with Spanish heritage students. The purpose of this study is to fill that void.

Description of Methodology

Students in this study completed the Beliefs about Language Learning Inventory (BALLI) (Horwitz, 1988), an instrument developed to assess ideas about language learning, and their responses were analyzed. The BALLI consists of 34 items divided into five areas: (1) the difficulty of language learning, (2) foreign language aptitude, (3) the nature of language learning, (4) learning and communication strategies, and (5) motivation and expectations. The questionnaire assesses learners’ beliefs using a 5-point Likert scale (with the exception of two items that use a multiple choice format). The responses of the heritage students were compared to the responses of the non-heritage students (as well as to student responses in previous studies in the literature).

Findings and Conclusions

Session attendees will learn about previous research on traditional (non-heritage) students’ language learning beliefs and how heritage and non-heritage students differ in their beliefs about language learning. They will also learn some strategies to help both sets of students be more successful language learners as well as areas for future research.

How does your research or creative work reflect the mission and core values of the university?

Psychological Science utilizes the scientific method of inquiry. Just like the field of Psychological Science, the University of the Incarnate Word, also focuses on the truth which can navigate to areas of innovation. This truth provides students an advantage to pursue their fields of focus. The ways we communicate are constantly changing and new technologies require constant adaptation. Some of the most used emoji's within computer mediated communication are joy, surprised, sadness and anger. These kinds of expressions are a logical evolution of verbal communication in the modern world. New technologies are constantly changing and it is important to understand how and why individuals express their emotions through the use of these ideograms.

Purpose of the Study

Expression of emotions is normally produced through body and facial expressions. Dimberg, Thunberg and Elmeheid (2000) demonstrated that distinctive positive and negative facial emotion response patterns can be unintentionally created when exposed to positive or negative stimuli. Due to the advancement of technology, social media has played a role in emotional expression. Past research has focused on the emotional expression of emoticons and how it is correlated with personality (Tkalcic, et al., 2016; Vidal, et al., 2005). More recently an emoji has become the ideogram used to express and perceive emotions within a variety of devices (Marengo, et al., 2017; Zhu, 2015). While developing a research project in regards to personality and the use of an emoji, in the context of pictures, it became apparent that the format of the emoji, not only depended on the device/program that is used, but also in the variety of emojis that can be used to express one specific emotion. The purpose of this study is to determine which emoji's should be used, regarding the type of device that participants use, to assist in an upcoming study in regards to computer mediated emotional expressions. The study will also indicate which pictures will be used in the upcoming study by categorizing them into positive, negative and neutral pictures.

Rationale and Significance

This preliminary study will assist in improving the study design and reliability of the stimuli for an upcoming project on the use of computer mediated emotional expression and personality. Since we used different categories of stimuli, content analysis will assist in determining which photos we present will reliably go with their respective categories.

This area of research provides an understanding of how computer mediated emotional expressions are related to personality characteristics. Within this area it will allow psychologists to explore how emotional expression may vary within technological communication.

Description of Methodology

UIW students in psychology classes participated in this study. They were emailed a recruitment letter. The data collection was conducted online; Participants could access the study from any electronic device with Internet access. Individuals who choose to participate in the study were provided a URL to access the study. This URL directed the participants to the study, administered via Qualtrics. The participant was asked which electronic device they mostly use to post an emoji. These devices/programs include Apple, Samsung, Facebook, LG, Google, and Twitter. The emojis that were used in the pilot study included happy, sad, surprised, disgust, anger, funny, contempt, fear and neutral faces. In addition to this, another component of the pilot study was created to help indicate the pictures that would be used in the upcoming study. Participants were shown 77 pictures and asked if they had an emotional reaction to the picture. If they did have a reaction they will then be asked to provide one or two words regarding the emotion it evoked and then to rate the level of that emotional response on a 5-point Likert scale. Fifty undergraduate students participated in the survey within the two week time period. Analysis is currently being conducted.

Findings and Conclusions

Preliminary analysis has shown the majority of participants mostly used Apple or Samsung devices to post emojis. In regards to the emojis, analysis examined the percentage of choices made for each emoji that was used to represent an emotion. Within two of the possible devices (Apple and Samsung) we were able to determine which emoji was mostly used for several emotions. For example, within this group of participants that use Apple devices this was the emoji that was mostly used for "happy". This was the modern version of this emoji has a smiling mouth, happy eyes, rosy red cheeks and eyebrows in the Apple artwork.

Content analysis is currently being used to determine if the pictures are grouped into positive, negative or neutral emotional categories. This will allow us to determine which ones will be used in a future study to determine if personality will relate to the types of emojis used to respond to positive, negative or neutral pictures.

How does your research or creative work reflect the mission and core values of the university?

Research in general is a difficult task to pursue, however, having students and researchers that are fascinated by expanding their knowledge create an important collaboration. University of the Incarnate Word (UIW) believes every student should receive a pristine education and allow students to expand their knowledge with accessibility to multiple resources. Researching and understanding the way animals behave and interact socially provides a foundation for a much larger scale of education and expansion of knowledge. Our research reflects the University's core values by expanding the communities' knowledge on a variety of different species and contribute to the discussion of understanding non-human mammal behaviors. Only by working collaboratively can we, as a community, better apprehend topics that can be used in a global discussion. We hope that through this presentation community members will be more educated and motivated to engage in this topic in the future. Finally, from this research we can explain how human care services focus on animal welfare.

Purpose of the Study

Describing how an animal allocates their time can be specifically beneficial in monitoring animal welfare. This study examined the distribution of play behaviors in bottlenose dolphins under professional care. The purpose of the study was to identify the frequency of the types of play behavior and the social associations that were formed within the play behavior.

Rationale and Significance

Competing demands such as courtship, foraging, and predator avoidance comprise the daily behavior patterns in aquatic mammals. Other behaviors, such as play, rest and travel also contribute to their pattern of behaviors. Describing how an animal allocates their time can also be specifically beneficial in monitoring animal welfare. For example, activity budgets can provide a means of assessing temporal allocations of behaviors, such as play. Kuczaj, Makecha, Trone, Paulos, and Ramos

(2006) suggest that the development of bottlenose dolphin calves may be contributed through an imitation of complex behaviors made by adult bottlenose dolphins. In another study, activity budgets in bottlenose dolphins, such as different times of day, seasons, and age groups were observed (Walker, Miller, Kuczaj, & Solangi, 2017).

Description of Methodology

In this current study archival data, which was collected by Walker et al., will be used to examine the observations of the bottlenose dolphins (under professional care) in regards to play behavior. Seven dolphins (three adults, four calves) were observed at one facility. Observed behaviors were recorded in mutually exclusive categories including rest, low intensity swim, high intensity swim, low intensity play, high intensity play and social play. Data were collected under a 24-hour time frame in 1-hour increments, throughout four seasons (fall, winter, spring, and summer) in 2000-2001. Play behavior of dolphins were categorized either in low play intensity, high play intensity, or social play. In low and high intensity play behavior, further categorization was used to identify solo, paired, and group behaviors. If dolphins underwent social play behavior, observations were marked of who they were engaging in social play behavior with, if any.

Findings and Conclusions

A wide variety of interactions were observed while gathering data. In early morning time blocks, like 12:00 – 05:00 little social and play activity was observed. Similarly, in many instances, late time blocks of 20:00 -23:00 also showed little social and play activity. Although this data may vary by season and by dolphin, most dolphins were absent of play behavior during these times. Data will be analyzed to determine the frequencies of the type of play and the social content of play behaviors for each dolphin. Studying and gathering play behavior of bottlenose dolphins helps with the understanding of developmental and social aspects through their engagement.



DREEBEN SCHOOL OF EDUCATION

Research Week 

The Dreeben School of Education is committed to students' academic and career success through partnerships with practitioners to implement programs where theory and practice meet. We utilize the latest technologies, teaching strategies, and best practices in education.

Research Week 

How does your research or creative work reflect the mission and core values of the university?

This research was conceptualized within a context that recognizes the value of diverse backgrounds and attempts to advance the discovery of truth. The researchers come from varying backgrounds and international cultures; however, they all desire to learn how more effectively to use the understanding of emotional intelligence and creativity to better prepare students to engage the community as entrepreneurs. Through innovative research and the adjustment of teaching techniques, the researchers hope to make a positive impact on students and ultimately the community in general.

Purpose of the Study

The purpose of our research is to determine how graduate students' entrepreneurial intentions are related to emotional intelligence and what role creativity plays in this process. We developed our research design based on Goleman's emotional intelligence model with its dimensions that are also important factors in the entrepreneurial process (Goleman, 1995). We aim to contribute to the fields of entrepreneurship and entrepreneurship education with this study.

Our research questions are as follows:

- 1- What influences entrepreneurial intentions?
- 2- How does emotional intelligence affect entrepreneurial intentions?
- 3- How does creativity affect entrepreneurial intentions?
- 4- How does impulse control affect entrepreneurial intentions?
- 5- How does problem solving affect entrepreneurial intentions?
- 6- How does interpersonal relations affect entrepreneurial intentions?
- 7- Is there a difference between demographically different groups on entrepreneurial intentions?

Rationale and Significance

Emotional intelligence (EI) defined as the "ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions"

(Salovey & Mayer, 1990, p.189), and is suggested to play an important role in entrepreneurial intentions in addition to multiple personal and social factors (Mortan et al., 2014). Creativity can be described as problem solving that involves the construction of new meaning (Runco, 2003). This study is significant as the combination of these three theories is a new way to approach entrepreneurship intentions. According to Goleman (1995), EI can be improved and increased through proper training and education. By determining the relationship between the factors of EI and creativity within the context of entrepreneurial intentions, instructors will be better able to shape students' entrepreneurial traits in the future.

Description of Methodology

This quantitative research study was conducted with graduate students at UIW via an online survey. In developing the survey instrument for the study, we were influenced by the instruments by Naktiyok & Timuroglu (2009) and Kickul, Jill, & D'Intino (2005). The survey consisted of 35 questions with 6 factors; impulse control, problem solving, interpersonal relations, emotional self-awareness, entrepreneurial intentions, and creativity. The survey instrument uses a 5-point Likert scale that ranges between 1-strongly disagree and 5-strongly agree.

First, a confirmatory factor analysis will be performed to inform on the quality of the survey factors. After this step, the proposed model will be tested with structural equation modeling to determine relationships between variables. If the results of structural equation modelling are not significant and if the required fit is not seen, then a regression analysis using SPSS will be conducted to determine if more basic relationships exist. In addition to the hypotheses, t-Test and ANOVA analyses will be used to determine if there is a significant difference between demographically diverse groups on entrepreneurial intentions.

Findings and Conclusions

We are currently in the process of collecting data that will be completed at the end of Fall 2017 semester. Data analysis will be completed and results will be ready to share by early January.

How does your research or creative work reflect the mission and core values of the university?

This research project reflects on the mission by addressing the whole person, educational excellence, and lifelong learning through highlighting a major of American history: public school integration. The project involved researching the events that occurred in 1954 in Hoxie, Arkansas, which occurred before the more well-known Little Rock in 1957. This work seeks to educate and bring awareness to complexities of race in American society prior to and immediately after the Supreme Court case *Brown v. Board of Education* which mandated integration and separate was not equal. This exemplifies liberal education and educational excellence in a context of faith in the Incarnate Word of God by focusing on understanding holistic human development and the need for understanding and seeing the basic needs of human interaction. This is especially important as we facilitate learning in our classrooms and mentor current or future educators and administrators. In alignment with the mission we each sought truth in the story of Hoxie and the innocence of children at play as while this work reflects heavily on social justice for all. UIW's mission includes educational excellence, the search for truth, innovation, care for the environment and others, social justice and community service. The story of Hoxie and its daring school board members, parents, and children speak to the importance of truth, justice, and equality of which UIW values and seeks for its community to exude. Through reflective practice, we researched this series of events and how play among and between children became political once external community members became aware of Lawrence County's decision to implement integration in compliance with the Supreme Court ruling. Few know of the role of Hoxie in education integration and this project seeks to highlight this small town's stance for equality and fairness.

Purpose of the Study

This purpose of study is to reflect on the public school integration events in Hoxie, Arkansas and how child's play became a political source of division, yet a sign of innocence and unity. We specifically sought to answer the following research questions, How did images of black and white children playing together stir controversy? and How did segregation and newly adopted integration affect social and cultural capital perceptions?

Rationale and Significance

As educators and facilitators of knowledge who work primarily with current and future educators, we felt it relevant to better understand the series of events that affected public school integration in the United States. It is often believed the Little Rock Nine of Little Rock Central High School was the

first attempt at integration. However, it was in Hoxie, Arkansas for the 1955-56 academic year where integration first occurred. Images of elementary school aged children playing together were featured in the *Memphis Press Scimitar* and *Life* magazine causing controversy for this small town. This project investigates a dark and disappointing part of American education history and how various forms of social and cultural capital exist and were uncovered in children's play.

Description of Methodology

This qualitative study utilizes the methodology of historical research in education, which is based on the premise that knowledge of the past informs today's discourses on education. Johnson and Christensen (2015) defined historical research as "the process of systematically examining past events or combinations of events to arrive at an account of what has happened in the past (Berg, 1998)" (p. 411). Historians are concerned with reliable sources of the past. The philosophical underpinnings of historical research are rooted in the epistemology of exploring past events, dates, places, and individuals, among others, in an effort to obtain "truths" that inform today's knowledge surrounding particular events. Historical researchers are also concerned with ontological notions of reality as a social construction. As described by Creswell (2009), "the researcher's intent is to make sense of (or interpret) the meanings other have about the world" (p. 8). Historical research is primarily concerned with multiple perspectives as a means to understand events. To understand the events of Hoxie, we felt this was the best approach combined with reflective practice to give us information as we reflect on role of politics and the right of equality.

Findings and Conclusions

From reviewing primary sources including newspaper and magazine articles dated during the time frame and watching a documentary, *Hoxie: The First Stand*, we derived two key findings. One finding involves the perception of what constitutes social and cultural capital and the other details the role of administrative and education personnel during political divisive times. These are both relevant to today's current political climate and the training of educators and administrators. These findings suggest the need for educators to highlight the meaningful contributions different cultures bring to various learning environments inside and outside of the classroom. Using the work of Luis Moll's framework on funds of knowledge, the authors conclude their various forms capital and educators can enhance their instruction and benefit by garnering a broader understanding of social and cultural capital and how relatively "simple" play can serve as exceptionally meaningful and learning intentional activity.

How does your research or creative work reflect the mission and core values of the university?

The mission values: teaching, research, and service, as a way to respond to the needs of the communities we are involved in. As students, educators, physicians, healthcare administrators we are all striving for one main goal, to educate the people in our community. Education represents a growing community and this is reflective of The University of the Incarnate Word and the City of San Antonio. We are the ones that will continue to move our society forward with higher education. In my research, when a community understands how clinical quality measures are defined, measured, and reported the knowledge is gained to create the best patient health care outcomes for our communities.

Purpose of the Study

The purpose of this study is to educate communities on physician reporting in regard to patient clinical quality measures and how unmet measures can result in penalties for physicians and patients, which are unspoken. We need to transform into a society that understands clinical quality measures; in which our own health care outcomes will be met at high standards. My hypothesis is that with Health Information Technology usage, patients will have access to view, download, share, what measures were met and which still have to be addressed. The MACRA policy makes reporting easier and MACRA forces providers to actually use the EHR to determine outcomes to impact patient lives. In 2019 when MACRA data is released further analysis can determine if providers are utilizing the MACRA policy to impact patient lives.

Rationale and Significance

The people, processes, and technology around implementation of a EHR system to drive patient outcomes remains a challenge for providers. Implementation of consistent aggregation, evaluation, and validation of patient data drives a successful quality healthcare organization. Further challenging widespread adoption, policy regarding physician reporting has been consolidated into The Medicare Access and CHIP Reauthorization Act (MACRA). The importance and effectiveness of measuring quality of care towards demonstrable improvements in patient outcomes emphasizes the value of leveraging an EHR system. The term healthcare quality is continually evolving, it's important to understand and build a 3, 5, and 10 years vision. By making clear organization missions, setting goals, and understanding how technology can empower clinical staff to integrate new processes, clinic leaders can bridge the gap to improved patient experience and overall quality and safety. Without physician adoption patients are not able to view, download, or share their own health care record.

Description of Methodology

Participants include eligible providers who document on a Certified Electronic Health Record System who report. Data is analyzed based on the four MIPS components within MACRA. Measurement is analyzing components of MIPS through aggregation of Health IT data.

Procedures include: 1.) Quality, which is selecting 6 measures. 1 Cross-cutting and 1 outcome measure. Selected individual measures but could have selected a specialty measure set. 2.) Resource Use, which includes no reporting requirements, but understanding of utilization reports and claims measures: Total per capita costs for all attributed beneficiaries. Using reports from CMS portal QRUR (Government and Private Insurances) to help track cost.

3.) Clinical Practice Improvement Activities (CPIA) - select 1 (90+ activities to choose from). 4.) Advancing Care Information (Similar to retired meaningful use) - reporting any measurement from the objectives.

Data was collected from the 2011-2014 Bureau of Labor Statistics 29-1062 Family and General Practitioners nationwide and the Centers of Medicare and Medicare Services Electronic Health Record Incentive Program payment and registration data report. The data was analyzed using Excel Version 15.25.1 and SPSS version 24.

Findings and Conclusions

More progress toward a patient-centered health care system that delivers better care, smarter spending, and healthier people and communities is needed. Overall Health IT adoption has not reached 20% nationally according to CMS data in 2014 and 2015. Two factors are needed for Health IT which is: patient portal access and Health Information Exchange (HIE). Those factors can only be met through full functional EHR usage. To summarize progress in adoption of EHR and subsequently reporting that leads to incentives: EHR usage nationwide among providers increased from 101,800 users in 2011 to 124,810 users in 2014. EHR incentives nationwide increased as well. In year 2011, 3,492 eligible providers received incentives and in year 2014, 13,935 eligible providers received incentives. Accountable Care Organizations (ACOs) using IT from 2011-2013 initially increased from 392 ACO providers to 881 in 2012, but decreased from 2013 which had 1,127 active ACO providers and went to 758 active ACO providers in 2014. A Descriptive statistics: Frequencies was completed in SPSS version 24 for to analyze years from 2011-2014. The variables of the analysis are the amount of incentive received and Primary Care Providers as the subset within all specialties. While EHR usage is climbing, reporting is stagnant. Incentives declined and are based on how many total years the physician had been reporting thereby lowering the incentive while increasing the percentage deduction per procedure reimbursement. The trend is improving and more physicians are adopting Health IT nationwide. Physicians need to be able to store, share, and analyze health information to better communicate and learn about a patient's best health outcomes and this can be seen within reporting. Without physician adoption of EHR usage, Health IT is not growing to allow patients to view, download, or share their own health care record. Interoperability and transparency should not even be a topic of policy if we cannot reach EHR adoption nationwide. EHR adoption should be the focus to lead to better care, smarter spending, and healthier people and communities.

How does your research or creative work reflect the mission and core values of the university?

The University of the Incarnate Word aims to educate men and women who will become concerned and enlightened citizens within the global community. Similarly, my study wants to find out the roles of play leaders and apply for MiniGEMS program. The research will benefit those middle schools girls and aim to arose girls' interests about STEM education.

Purpose of the Study

This qualitative study specifically focused on San Antonio Zoo play leaders' perspectives. The research tries to understand the approaches that play leaders use to facilitate play and evaluate the influences of play leaders on children's play. This research discusses the roles of play leaders and makes a plan of how to apply play leader's theories into MiniGEMs program.

Rationale and Significance

Play has the common goals of interacting environmental elements and integrates various loose parts such as logs, sticks, stones, and tools. Children grow their cognitive, creative, physical, social, and emotional skills when playing in nature. However, unsupervised nature play has many obstacles. Parents often have concerns about safety and playfulness when children play in unsupervised nature play spaces. Most children are given less freedom to play in these unsupervised playgrounds. Play leaders, also called playworkers and play facilitators, are adults who are trained to support children's play and are committed to providing play opportunities for children. The play leader mainly has three roles: observer, participator, and facilitator. In recently, several literatures show that the role of play leader is advocator.

Description of Methodology

Written documents were gathering from San Antonio Zoo play leaders' anecdotes. San Antonio Zoo Nature spot opened its doors in 2004 as an exhibit designed for children ages five and under. Children's play leaders work to facilitate nature-based children's play. San Antonio Zoo requires play leaders to write anecdotes to track and reflect their work. The anecdotes wrote by several play leaders which record important activities and reflections. In this study, I used grounded theory analysis approach as my research methods to code and interpret 34 anecdotes which were written from January 1st, 2017 to April 30th, 2017 by 10 Play leaders in San Antonio Zoo. Dedoose software had been used for initial coding and categorizing the codes.

Findings and Conclusions

1. Play leaders connect children's life experiences to understand children's interests, inspire them to think deeper, and build on new knowledge in fun and engaging ways.
2. Play leaders utilize natural loose parts and organize activities to deliver conservation information, transfer science knowledge, and improve children's awareness of protecting animals.
3. Play leaders encourage visitors to participate play and replicate activities at home, resulting in visitors' better understandings of outdoor play and possible family trips.
4. Play leaders provide various play instruction and activities, for which children board their minds and create their games. Meanwhile, children are willing to share the lessons learned from San Antonio zoo to other people.
5. Play leaders play multiple roles that they need to prepare play materials, recruit participants, participate the game, observe the processes, and facilitate learning.

How does your research or creative work reflect the mission and core values of the university?

By bringing researchers from diverse backgrounds and fields together, this research aims to advance the communication of truth. This will make evidence-based findings available to those who will be teaching tomorrow's students; enabling researchers to contribute to the knowledge and teaching practices to help our pre-service teachers' to be better writers. This research will give us an opportunity to better understand pre-service teachers' writing beliefs and how they change with certain interventions over time, which could enable teacher education programs to better develop future writing teachers. This research is a clear manifestation of UIW's dedication to truth and service. The researchers are committed to providing knowledge that will enable tomorrow's teachers to offer excellent instruction to their students.

Purpose of the Study

This research aims to encourage the meaningful use of the writing process by pre-service teachers (PSTs) to improve both the quality of their writing and to increase their self-efficacy as writers.

Instructors in four different courses in the Teacher Education Program introduced adjustments to their writing instruction to focus more on revision and reflection on the writing process. The study addresses the following research question: How do revision strategies and reflection on writing influence students' self-efficacy in writing?

Rationale and Significance

Teaching PSTs how to write is one of the most difficult and complex tasks of teacher preparation. Our work across Education and English aims to support PSTs as they develop their own efficacy as writers, strengthen their writing ability, and consider ways to teach writing well. Writing beliefs affect writing performance as these beliefs influence how writing assignments are approached, the willingness to improve writing, and the PSTs' views of themselves as writers (Shell, Murphy, &

Bruning, 1989; Zimmerman & Bandura, 1994). Writing beliefs of PSTs will have effect on their future students' writing performances (Draper et al., 2000). Understanding of the writing process, and their identities as writers, can positively affect their practice as teachers of writing (Morgan & Pytash, 2014). We took up this call to examine PSTs' preparation to teach writing because it is "an under-researched area of inquiry" (Morgan & Pytash, 2014, p. 29).

Description of Methodology

This research is part of a larger, formative research study of undergraduate preservice teachers' writing at UIW. This poster reports on the survey element of the research. PSTs were asked to take a survey in the beginning and at the end of the semester. In developing the survey instrument for the study, we drew on the work of White and Bruning (2005). The survey instrument consists of 18 items and uses a 4-point Likert scale that ranges between 1-strongly disagree and 4-strongly agree. Only one question in the survey is open ended. The sample size will be about 50 students. A paired samples t-test will be completed to determine if there is a change in the scores of self-efficacy before and after the intervention introduced during the semester. Qualitative analysis of the open-ended question will draw on a priori categories (Miles & Haberman, 1994) from Morgan and Pytash (2014) and pilot analysis of the larger qualitative data corpus from the Fall 2016 and Spring 2017 semesters.

Findings and Conclusions

We are currently collecting data that will be completed at the end of Fall 2017 semester. Results will be ready to share by early January. Initial qualitative analysis from non-survey data, from the Fall 2016 and Spring 2017 cohorts, pointed to students having a more positive view of their writing and their process than previous research has shown.



FEIK SCHOOL OF PHARMACY

Research Week 

The Feik School of Pharmacy embraces the Mission of the university as it develops a group of caring faculty and student scholars who are dedicated to impacting the health care needs of the people of south Texas and the nation. The program focuses on a strong foundation in the basic, pharmaceutical, administrative and clinical sciences using innovative technology, curricular integration, lifelong learning and critical thinking to provide high-quality, evidence-based pharmaceutical care with opportunities for multicultural and multilingual development.

Research Week 

How does your research or creative work reflect the mission and core values of the university?

The mission of the University of the Incarnate Word is rooted in the commitment to service. In order to serve others, one must be in constant pursuit of truth. In order to be successful, we each must possess the belief that we must take responsibility for whatever happens. The state of a community improves once each individual of that community changes what is within themselves. With innovation being a core value of the University of the Incarnate Word, we must explore new ways of doing things by increasing our sense of curiosity and vitality, challenging our line of work, and excelling in it.

Purpose of the Study

The role of the community pharmacist may change rapidly with additional patient-focused duties. There may be a gap between those trying to advance the profession and the community pharmacists that would be performing the added duties. Historically, it has been difficult to assess the perceptions of these busy professionals. This project will provide insight into the opinions of practicing community pharmacists in Bexar County (San Antonio, TX area) on areas of expanding practice while mitigating elements of sampling/convenience bias. The basis of this methodology as well as the results may provide a platform for further research with a broader scope.

Rationale and Significance

The role of the community pharmacist may change with additional patient-focused duties. There may be a gap between those trying to advance the profession and the community pharmacists performing the added duties. Traditionally, it has been difficult to assess the perceptions of these busy professionals. The quality of the data from sample surveys depends on several factors including, but not limited to, mitigating bias, specifically the non-response bias and the convenience sample bias. Reliability and accuracy of the data may be improved by attempting to reach subjects within the sample in person and at their place of practice.

Description of Methodology

The design of the methodology focused on mitigating

elements of sampling/convenience bias by constructing a concise survey and delivering it in person to potential participants. The geographic area was divided into 8 sub-county sectors, and each sector was affiliated with a set of zip codes. The reason for this divide is due to data on morbidity and mortality distribution consistently following social and economic patterns within Bexar County. Within each sector, selection was ensured with the goal of a 1:1 ratio of chain to independent pharmacies to be met. Store count was used to differentiate an independent from a chain pharmacy. Each pharmacy in the selected sample will be visited by the researcher who will request the pharmacist on duty's participation. Subjects included registered pharmacists in Bexar County. All surveys will be offered in person to all potential participants primarily via paper format. The survey instrument consists of general demographic questions, two Likert scales (one of pharmacist's opinion regarding pharmacy services in general, and the other regarding comfort level in using collaborative practice), and one ranking scale (potential barriers regarding use of collaborative practice agreements within a retail setting).

Using IBM SPSS version 22, quantitative analysis of data will be based on descriptive statistics. Statistical tests include frequency, sum, mean, median, mode, standard deviation, range, variance, minimum value, maximum value, and range.

Findings and Conclusions

Upon completion of data collection, 65 pharmacies have been visited by the same researcher (student) in person. Of the 65 pharmacies, 63 agreed to participate in taking the survey (response rate of 96.9%). Data analysis, using IBM SPSS version 22, is currently underway and will be completed by the end of Fall 2017.

The community pharmacist is responsible for utilizing the training received in pharmacy school that includes the full scope of patient-centered services. Better understanding by pharmacy leadership of the willingness and barriers perceived by community pharmacists may enable leadership to mitigate these concerns and allow the profession a stronger chance of successfully enacting additional professional duties.

How does your research or creative work reflect the mission and core values of the university?

This research explores the synthesis of new substances with therapeutic potential, while giving High School, undergraduate and Pharmacy students the opportunity of learning research techniques and critical thinking, reflecting the core values of innovation and education.

Purpose of the Study

Diaminopyrimidines have been identified as potential therapeutic agents against the neglected tropical disease leishmaniasis, inhibiting an important enzyme in the metabolism of folic acid in the parasite causing this disease. This study is the first step in synthesizing a series of diaminopyrimidines for testing against leishmaniasis by preparing the intermediate ketonitriles.

Rationale and Significance

Leishmaniasis, classified as a Neglected Tropical Disease (NTD), is a parasitic infection caused by protozoan from the genus *Leishmania*. Leishmaniasis is a disease with high morbidity and mortality in developing countries. Current drugs against this disease are toxic, expensive, and require long-term treatment, leading to low patient compliance. Dihydrofolate reductase (DHFR) inhibitors such as methotrexate, trimethoprim, and pyrimethamine have

been investigated as options of treatment against leishmaniasis; however, these classical DHFR inhibitors has shown minimal to no activity. One of the reasons DHFR inhibitors are not effective is because the parasite has an enzyme called pteridine reductase (PTR1), which is an alternative pathway for reduction of folate. Diaminopyrimidine derivatives have the potential to inhibit PTR1 and ketonitriles are intermediates for the synthesis of diaminopyrimidines.

Description of Methodology

Most reactions were started by one student and finished/purified by another. Reactions were planned and scheduled in such a way that the students could perform each of the steps at least once. Substituted nitriles react with esters in the presence of a strong base (potassium tert-butoxide) to form ketonitriles, which will be transformed into methoxy nitriles and cyclized with guanidine to form diaminopyrimidines

Findings and Conclusions

Several beta-ketonitriles were prepared as intermediates for the preparation of diaminopyrimidines. They are in the process of being fully characterized by nuclear magnetic resonance and mass spectrometry and will be treated with guanidine to produce diaminopyrimidines.

Factors influencing provider and patient choice of P2Y12 inhibitor therapy

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How does your research or creative work reflect the mission and core values of the university?

This research project reflects the mission of the university through the core values of education and innovation. Historically, the practice of medicine has been often one-sided, with recommendations delivered in a paternalistic, provider-to-patient manner. A process known as shared decision making allows providers and patients to work together to make decisions that are based on clinical evidence that balances risks and expected outcomes with patient preferences and values. The shared decision making approach is valuable but relies on appropriate patient disease-state and drug-therapy comprehension in order to engage in this communication method. A baseline assessment of patient values regarding antiplatelet drug-therapy for heart attack or cardiac stent placement is essential to developing the educational tools necessary to facilitate shared decision making. The results of this research will also generate comparisons between cardiology provider values and patient values regarding drug-therapy selection.

Purpose of the Study

Multiple factors affect the decision of drug choice for cardiology providers and patients. It is unknown which of these factors are most valued by cardiology providers and patients in selection of antiplatelet therapy. Our study aimed to determine cardiology provider and patient values that affect selection of P2Y12 inhibitors post-Acute Coronary Syndrome (ACS) with or without stent placement and Stable Ischemic Heart Disease (SIHD) with stent placement. We hypothesize a difference exists between cardiology provider and patient values regarding prescription of P2Y12 inhibitors, highlighting the potential for educational efforts to guide shared decision.

Rationale and Significance

Dual antiplatelet therapy with aspirin and a P2Y12 inhibitor--clopidogrel, prasugrel, or ticagrelor--is standard-of-care for management of two common clinical scenarios: ACS with or without stent placement and SIHD with stent placement. Clopidogrel is the most commonly prescribed P2Y12

inhibitor for these indications; however, clinical trial data demonstrate situations in which ticagrelor or prasugrel may be preferred to clopidogrel, a recommendation evident in American Heart Association/American College of Cardiology and European Society of Cardiology clinical practice guidelines.

Description of Methodology

Single-center study, with surveys distributed to cardiology providers and patients associated with a local academic medical center from November-December of 2017. Paper surveys were given to cardiologists and fellows within the division of cardiology. Paper surveys were sent to patients recently prescribed a P2Y12 inhibitor for ACS with or without stent placement or SIHD with stent placement. Patient surveys were mailed via United States Postal Service. Reminder postcards were sent 2 weeks after the initial survey, followed by a second survey 4 weeks after the initial survey to non-responders. Respondents were asked to rank factors associated with P2Y12 inhibitors including cost, dosing regimen, adverse effects, and efficacy in order of importance and to select preference of P2Y12 inhibitor given hypothetical scenarios. Patient survey respondents were asked to describe their perception of financial burden, adverse effects, previous P2Y12 inhibitor use, and participation in shared decision making. For statistical analysis, parametric descriptive statistics will describe both populations, non-parametric analyses using Kruskal-Wallis will describe rankings of influential factors. If significantly different, Mann-Whitney tests will assess if the cardiology provider rankings match patient rankings. Non-parametric Chi-square test for independence will assess congruity of medication prescribed by the cardiology provider and desired by the patient.

Findings and Conclusions

Survey distribution will take place from November to December of 2017. The deadline for survey submission is January 18, 2018. Following this date, data analysis will occur and author's conclusions will be determined.

How does your research or creative work reflect the mission and core values of the university?

One of the core values of our University is the search of truth, which has been translated into my research. This work fulfills this mission and is reflected in its innovation and approach to understand how biological systems work and how it may serve as a new therapeutic approach.

Purpose of the Study

Salvinorin A and B are two ingredients of the *Salvia divinorum* plant. Both Salvinorin A & B has been shown to have affinity for the KOR and are believed to utilize a novel drug-receptor interaction via residues that are not utilized by conventional synthetic KOR agonists (e.g. U50-488H; U50). The central hypothesis of this study is that central administration of Salvinorin A & B will produce marked effects on renal function that are different from the diuretic and antinatriuretic effects evoked by the U50. The purpose of this study is to examine the cardiovascular and renal effects produced by central administration of Salvinorin A and Salvinorin B as compared to the synthetic kappa opioid receptor (KOR) agonist, U50.

Rationale and Significance

Fluid and electrolyte homeostasis is a critical physiological function modulated by multiple mechanisms. In addition to the well-studied neuronal, hormonal, and hemodynamic mechanisms involved in water and sodium (Na⁺) excretion, opioid ligands can also evoke changes in cardiovascular and renal function. Central (intracerebroventricular, ICV) increases urine flow and renal sympathetic nerve activity (RSNA), with a concurrent decrease in Na⁺ excretion rate (antinatriuresis). These effects contrast with traditional diuretics suggesting that kappa opioids could have important therapeutic advantages treating hyponatremia in different pathological conditions (e.g., congestive heart failure). Salvinorin A and B are unique and highly selective kappa opioid receptor agonists. Although kappa opioids have been demonstrated to produce central nervous system mediated changes in renal function, the cardiovascular and renal effects of Salvinorin B are yet to be determined.

Description of Methodology

Four groups (n=6 each) were used in this series: 1) control rats injected with saline vehicle ICV, 2) rats injected with Salvinorin A ICV (10 nmol), 3) rats injected with Salvinorin B ICV (10 nmol), 4) rats injected with U50 ICV (10 nmol). Rats were anesthetized with isoflurane and chronically implanted with a 22-gauge stainless steel cannula in the right lateral cerebroventricle (ICV), implanted with catheters into the femoral artery and vein, and urinary bladder for measurements of cardiovascular functions, infusion of saline, and urine collection, respectively. After completion of the surgery, the rat was placed in a holder and allowed to regain consciousness while being infused with isotonic saline at 55 microliters/minute. After cardiovascular and renal excretory parameters stabilize (2-3 hours), two ten-minute urine control samples were collected. Rats received then ICV injections of drugs (described above) or matched volume of saline vehicle. After ICV injection, urine samples were collected every 10 minutes for 90 minutes while BP and HR were also being recorded. The collected urine samples were weighed and analyzed for Na⁺ concentration. At the end of the experiment, animals were euthanized with an overdose of Inactin (75 mg/kg).

Findings and Conclusions

Administration of U50 produces a marked water diuresis (increase in urine output without increase in Na⁺ excretion). In contrast, Salvinorin A increased urine output (diuresis) without affecting the excretion of Na⁺. Salvinorin B failed to increase urine outflow or Na⁺ excretion. All three drugs failed to change cardiovascular function at the studied doses. From these studies, it is apparent that Salvinorin A effects on renal function differ from those elicited by synthetic KOR agonists, such as U50. This is unique since endogenous or synthetically made KOR agonist produces a diuresis and antinatriureis. It is also different from most diuretics currently used to treat volume overload, which evokes a diuresis and natriuresis (increase in Na⁺ excretion). As such, this class of drugs may be used as a novel therapeutic agent in certain diseases such as heart failure.

Effect of Glucose, Sodium Chloride, and Apple Cider Vinegar Concentrations on Glycation and Aggregation of Bovine Serum Albumin

Franklin, Cynthia, MS; Hobbs, Jacqueline; & Coker, Adeola, Ph.D

How does your research or creative work reflect the mission and core values of the university?

The work evaluates the effect of two common nutrients, glucose and sodium chloride, as well as a supplement, apple cider vinegar (ACV), on the glycation of bovine serum albumin. Glycation is a chemical process that occurs between sugars and molecules such as proteins in the body. It is the first step to many of the complications observed from high blood sugar and diabetes. The study aims to determine if ACV inhibits glycation. It relates to the UIW core values of the mission: education, truth, and innovation. The results of the research may be useful in educating patients about how to use common food items, such as ACV to stay healthy.

Purpose of the Study

To determine the effect of apple cider vinegar and sodium chloride on the glycation of albumin.

Rationale and Significance

Uncontrolled high blood sugar results in protein glycation and the formation of “advanced glycation end-products or “AGEs”, which are implicated in diabetic complications. Several studies support reducing glycation for diabetes therapy. Nutritional interventions, such as eating foods that contain compounds that inhibit the glycation reaction, have shown promising results. Apple cider vinegar (ACV) is a food item touted to help with diabetes and has been found to reduce Hemoglobin A1c levels in diabetic rats. We studied the effect of ACV on glycation of albumin, the most abundant protein in the body. We also looked at the effect of combining ACV with sodium chloride since salt

concentration affects how proteins react. This study is significant because it can provide insight on the effect of ACV on the glycation of albumin and may be useful in educating patients about using common food items, such as ACV to stay healthy.

Description of Methodology

A central-composite, multivariate statistical experimental design was used. The levels screened were 0 to 50 mM for glucose, 0 to 300 mM for sodium chloride, and 0 to 3% (v/v) for ACV. The high levels of glucose and sodium chloride exceed typical concentrations found in the body and will be useful for characterizing the effects of high levels of these compounds on the glycation process. The high level of ACV also exceeds blood concentrations after ingesting daily recommended doses (assuming 100% bioavailability)

Glycation of BSA was done at 37°C in phosphate buffer containing differing amounts of glucose, sodium chloride and ACV. To evaluate the effect of acetic acid (the major component of vinegar), the experiment was also performed by replacing ACV with an equivalent amount of acetic acid. The extent of glycation was monitored using fluorescence spectroscopy. The extent of BSA aggregation was also monitored, using size-exclusion chromatography.

Findings and Conclusions

The experiments have been completed and results being analyzed. Analysis of the data will be completed by the end of Fall 2017 and presented in the poster.

How does your research or creative work reflect the mission and core values of the university?

This research explores the synthesis of new substances with therapeutic potential, while giving undergraduate and Pharmacy students the opportunity of learning research techniques and critical thinking, reflecting the core values of innovation and education.

Purpose of the Study

To synthesize the initial building blocks for the total synthesis of the natural compound Callyspongamide A

Rationale and Significance

Callyspongamide A is a linear, long chained polyacetylenic amide that has been isolated in a small quantity (3 mg) from *Callyspongia fistularis*, a sponge collected in the Red Sea. Its structure was determined through NMR (nuclear magnetic resonance) and high-resolution mass spectral measurements, and cytotoxic activity was reported against one cancer cell line. It is our intention to prepare Callyspongamide A in sufficient quantities to be tested against other cancer cell lines.

Description of Methodology

Students were able to use anhydrous solvents, trained in handling moisture-sensitive reagents, and learned basic purification techniques (such as distillation and column chromatography). Most reactions were started by one student and finished/purified by another. Reactions were planned and scheduled in such a way that the students could perform each of the steps at least once. The main reactions performed were the protection of an acetylenic alcohol with dihydropyran, protection of a halo-alkyl alcohol with MEM (methoxy-ethoxy-methyl) and the coupling of both mediated by n-butyl lithium under low temperature and inert atmosphere.

Findings and Conclusions

Key building blocks for the synthesis of Callyspongamide A were prepared and are in the process of full characterization by nuclear magnetic resonance and mass spectrometry. Those intermediates will be used for the total synthesis of the natural compound and testing against cancer cell lines.

How does your research or creative work reflect the mission and core values of the university?

This research project supports the core value of Innovation of the university. Social media was an innovation that Feik School of Pharmacy had not explored. The project investigated the use of social media by US pharmacy schools to evaluate if our school should have a social media presence. The results of the project supported our schools launch into social media and helped guide what social media platforms were used.

Purpose of the Study

The purpose of this study is to evaluate the patterns of social media use by U.S. pharmacy schools and the size of the following audience.

Rationale and Significance

Social media has become the latest tool for pharmacy schools to engage applicants, students, alumni, and the broader public. It is an opportunity to share information, advertisements, and news related to pharmacy issues and health matters. Universities may be aware of the capabilities of social media, but these technologies may not be used to their fullest potential.

Description of Methodology

All 135 pharmacy schools holding pre-candidate, candidate, accredited with probation, or accredited status with Accreditation Council for Pharmacy Education were included in the study. Each

school's social media content was reviewed and recorded by 2 separate reviewers over a 3-week period (May 27 – June 15th, 2016) to determine number of sites used as well as number of posts and likes specific to Facebook, followers for Twitter, and Instagram. Each school's number of applications, degrees conferred, and enrollees from 2014-2015 were collected. US News and World Report rank and score were collected and correlated to use of social media. Logistic regression was used to characterize the association of social media presence (had an account or not) while multiple regression was used to identify measures of social media attention (followers and "likes") and activity (posts and tweets).

Findings and Conclusions

Twitter and Facebook were the most common social media platforms used. In total, 80% of pharmacy schools have a Facebook page, while 63% have a Twitter account and 27% have an Instagram. Roughly 16% of pharmacy schools had no social media presence whatsoever. Older universities were more likely to have Facebook and Twitter accounts. Facebook, Instagram, and Twitter account status was not correlated with number of applications. US News and World Report score correlated with Facebook posts, Facebook likes, and Twitter followers. Additionally, Facebook likes had a moderate correlation with the number of applicants. Time from accreditation correlated with an increase in Facebook likes and Twitter followers.

How does your research or creative work reflect the mission and core values of the university?

Our research is aimed to educate trained healthcare professionals with the goal of optimizing patient care during a mass anthrax exposure. This research initiative will supply its community's healthcare professionals with targeted knowledge for the care of complex patients; ultimately enabling all healthcare professionals to come together, work as one unit in service of patients, and apply this new-found knowledge towards the common good. This information will be accessible, accurate, and extremely beneficial in an emergency where weaponized anthrax has been used.

Purpose of the Study

The purpose of our research is to provide prescribers with a quick, easy way to effectively and safely dispense medications to complex patients exposed to anthrax.

Rationale and Significance

Local communities are provided with large amounts of antibiotics and medical supplies from the federal government in the event of an anthrax attack. The provisions are distributed to local sites referred to as Points of Dispensing (PODs). PODs are normally stocked with doxycycline, ciprofloxacin, and limited amounts of amoxicillin. Choosing a medication is dependent on factors such as age,

renal/hepatic competency, current medications a patient is taking, and availability of the antibiotic. Our research considers these factors, and aims to pre-determine which medication is both effective and safe to dispense, specifically in multifaceted or complex patient cases.

Description of Methodology

We began our research by reviewing the dispensing form supplied by the City of San Antonio's Metropolitan Health District, and noting all occurrences that required medical consults. These noted occurrences we then termed as complex patient cases. With the potential complexities clearly identified, we researched what the best course of action would be for each specific, isolated case using primary resources found through Lexicomp's drug-drug interaction checker. To finish, we consolidated all the gathered information into a single comprehensive document for easy accessibility in the case of an anthrax emergency.

Findings and Conclusions

Ultimately, our research will be provided to local disaster response resources and facilitate optimal treatment options for complex patient cases. This beneficial resource may be utilized by healthcare professionals to further guide them when choosing which medication to prescribe and dispense.

Effect of non-selective beta-blockers on mortality in patients with end-stage cirrhosis

Jenna L. Snoga, Pharm D; Russell T. Attridge, PharmD, MSc, BCPS;
Kathleen A. Lusk, PharmD, BCPS; & Rebecca L. Attridge, PharmD, MSc, BCPS

How does your research or creative work reflect the mission and core values of the university?

This is an innovative research project that will promote life-long learning for me as a pharmacy resident. Conducting research is an important component of a clinical pharmacist's job. Improving patient outcomes should be our number one priority, but this would be hard to accomplish without studies being published regularly. The goal of these research studies should be to educate and inform practitioners so that they can practice evidence based medicine.

Purpose of the Study

The aim of this study is to evaluate the effect of NSBB use on mortality in patients with end-stage cirrhosis.

Rationale and Significance

Non-selective beta-blockers (NSBB) reduce portal pressure and are recommended for primary and secondary prevention of variceal bleeding in patients with cirrhosis.

The use of NSBBs in patients with end-stage liver disease has been controversial, and recent data has suggested that these agents may be associated with poor outcomes. These observational studies have found that NSBBs are associated with higher rates of mortality once patients develop refractory ascites or spontaneous bacterial peritonitis. In addition to these studies, the window hypothesis by Krag et al postulates that there is a therapeutic window for when the use of NSBBs are considered to be safe and effective. The window hypothesis infers that the therapeutic window for NSBB therapy closes once patients develop end-stage cirrhosis. On the contrary, there are several observational studies that refute these findings and suggest that NSBBs are not associated with poor outcomes in patients with end-stage cirrhosis.

With the current conflicting data on the safety and efficacy of NSBBs in patients with end-stage cirrhosis, it remains difficult for practitioners to justify if the benefits of NSBB therapy outweigh the risk.

Description of Methodology

We performed a single-center, retrospective cohort study of patients who received intravenous octreotide for an acute variceal bleed between July 2006 to January 2017. Patients ≥ 18 years of age who received intravenous octreotide and met criteria for end-stage cirrhosis were included. Patients were stratified into two groups based on whether or not a NSBB was prescribed at hospital discharge. The primary outcome was mortality at 24 months. A total of 217 patients met inclusion criteria. Most patients received a NSBB at discharge (87.6% vs. 12.4%).

Findings and Conclusions

Baseline characteristics were similar among groups; however, patients who did not receive a NSBB were more likely to have a higher Model for End-Stage Liver Disease (MELD-Na) score ($p=0.0464$), require hemodialysis ($p=0.0002$), and had a higher frequency of hepatic encephalopathy ($p=0.024$). NSBB patients were more likely to be male ($p=0.0357$) and less likely to be prescribed spironolactone ($p=0.0362$). The median dose of NSBB was 20 mg (20-40 mg). Overall, 24-month mortality was 29.2%. The NSBB group and no-NSBB group had a similar mortality rate at 24-months (27.8% vs. 39.1%, $p=0.33$). There were no statistically significant differences in mortality at 3-months (10.0% vs. 18.5%, $p=0.19$) and 12-months (17.9% vs. 32.0%, $p=0.11$). The MELD-Na score was the only independent predictor of 24-month mortality in the nominal logistic regression model ($p < 0.0001$). NSBB therapy with either propranolol or nadolol in patients with end-stage cirrhosis was not associated with an increase in mortality.

Structure-Activity Relationship studies of Novel Fluoroquinolone Amides

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How does your research or creative work reflect the mission and core values of the university?

Our research is inclusive and collaborative in nature. Faculty, students, and staff supported one another (internally and externally) in search of thoughtful innovation. As life-long learners, this research project has helped us to develop personally and professionally.

Purpose of the Study

The burden of bacterial infections is huge due to the rapid emergence of antibacterial resistance strains to the existing therapies. Therefore, there is an urgent need for developing new molecules to combat bacterial resistant strains. The current study was designed partly based on ACH 702, a novel isothiazolofluoroquinolone. We synthesized eight new molecules containing fluoroquinolone core linked to thiazolidine and N-amino thiazole side chains by an amide bond. The synthesized compounds were evaluated for minimum inhibitory concentrations (MICs) against a series of bacterial strains and cytotoxicity was determined. The most active compounds were also evaluated for bacterial DNA gyrase and topoisomerase IV inhibitory effect, which are known targets for fluoroquinolones. Our ultimate aim is to find novel compounds with better antibacterial activity than currently used fluoroquinolones.

Rationale and Significance

The significance of this research is to develop novel fluoroquinolones that lack the 3-carboxylic acid group. The molecules are partly design based on ACH-702 that lack the carboxylic acid group. ACH-702 was developed by Achillion Pharmaceuticals and has potent antibacterial activity. In ACH-702, isothiazolone core is fused with fluoroquinolone forming a tricyclic ring system. In our current study, five membered heterocyclic rings were introduced in the form of thiazolidine and N-thiazolyl side chains at C3 position instead of a directly fused ring as in ACH-702. Many of the clinically available antibacterial compounds contain an amine functional group at C7 position, which is required for optimal activity. Therefore, we designed molecules that contain monocyclic or bicyclic amines at C7 position on fluoroquinolone ring.

Description of Methodology

The proposed compounds were synthesized using a two-step chemical reaction starting from the commercially available materials. In the first step, amine intermediates were synthesized by nucleophilic substitution on the

fluoroquinolone ring at 7-position by refluxing 1-cyclopropyl-6, 7-difluoro-8-methoxy-4-oxo-1, 4-dihydroquinoline-3-carboxylic acid in acetonitrile/triethylamine with amines (piperidine, octahydro-1H-isoindole, perhydroisoquinoline, pyrrolidine, and morpholine). Yields were 48-89%. The 3-carboxylic acid group in these intermediates were subsequently coupled with thiazolidine and 2-aminothiazole to yield thiazolidine amide (54-60% yields) and N-thiazolyl amide (24-53% yield) fluoroquinolone derivatives. The coupling reaction was carried out in dimethylformamide, HATU, and diisopropylethylamine.

We systematically evaluated the new compounds for their in vitro antibacterial MICs against *Staphylococcus aureus*, *Enterococcus faecalis*, *Streptococcus pneumoniae*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii*. Three fluoroquinolones in thiazolidine amide series containing 7-amino substitution had appreciable MIC activity against *Staphylococcus aureus* (0.39-6.3 µg/mL). They were further tested for in vitro bacterial enzymatic inhibition against bacterial gyrase and topoisomerase IV by personnel at Inspiralis Ltd. (Norwich, United Kingdom). The most active compound had IC₅₀ 33.9 µM and 116.5 µM against *Staphylococcus aureus* DNA gyrase and topoisomerase IV respectively.

Findings and Conclusions

We have successfully synthesized and characterized eight new fluoroquinolones by a two-step synthetic route. We have characterized all of our final products using nuclear magnetic resonance and mass spectrometry. The purity of the compounds was determined by high pressure liquid chromatography. Based on the structure-activity relationship studies we conclude that thiazolidine amides have better antibacterial activity than N-thiazolyl amide analogs. The synthesized compounds will serve as lead molecules to further develop non-carboxylic acid fluoroquinolones with an intent to enhance anti-staphylococcal activity.

Reference: Garza, I., Wallace, M. J., Fernando, D., Singh, A., Lee, R. E., Gerding, J. S., Franklin, C. and Yendapally, R. Synthesis and Evaluation of Thiazolidine Amide and N-Thiazolyl Amide Fluoroquinolone Derivatives. *Archiv der Pharmazie*. 2017, 350 (6), e201700029.



The H-E-B School of Business and Administration offers a unique atmosphere where regional charm meets a cosmopolitan culture. Students can expect a practical education that emphasizes a global reach with respect to international and cultural understanding. The HEBSBA offers high-quality undergraduate and graduate programs steeped in the UIW traditions of faith, service, innovation, truth and education.

ECONOMIC EMPOWERMENT OF IDPs & URBAN REFUGEES: A Case Study of IDPs in Nigeria & Urban Refugees in the USA

Dr. ADIMULA, Abiola Ruth & Dr. ZANCA, Nürşen A.

How does your research or creative work reflect the mission and core values of the university?

As peace scholars, the authors feel a moral obligation to bring attention to the ongoing refugee crisis around the globe. The primary goal of our paper is to provide visibility for IDPs' and urban refugees' economic potential. The authors hope that this paper will inspire other researchers to investigate other refugee pockets around the world. This research paper would represent a small contribution to filling the need and thus of serving both moral and economic progress.

Purpose of the Study

The primary goal of this paper is to demonstrate the economic potential of IDPs (Internally Displaced Persons) and urban refugees. What is the economic value of IDPs and refugees? How to help IDPs and refugees whose lives have been disrupted by absence of peace, to re-settle and prosper?

The authors anticipate that the findings of their research will provide some insight for the ongoing refugee crisis across the globe.

Both authors of this paper are 2017 Rotary Peace Fellows. This poster paper is a product of their research conducted at the Rotary Peace Center at Chulalongkorn University, Bangkok, Thailand.

Rationale and Significance

There are popular myths surrounding IDPs and refugees: they are economically isolated; they are a burden on host states; they are economically homogenous; they are technologically illiterate; and they are dependent on humanitarian assistance. Evidence shows that the economic impact of re-settled IDPs and refugees can be positive and substantial.

Description of Methodology

This poster paper will demonstrate a 'Conflict/Problem Tree' in the context of IDPs in

Nigeria and urban refugees in the USA. Peace scholars frequently use 'Conflict/Problem Tree' as it visualizes the interaction between structural, manifest and dynamic factors related to a conflict situation. While the roots symbolize structural 'static' factors, the trunk represents 'manifest issues' linking structural factors with the dynamic factors; and the leaves represent the 'dynamic factors.'

The uniqueness of this research paper comes from our attempt to turn the well-known 'Conflict/Problem Tree' into an 'Opportunity Tree.' Here, we display IDPs and urban refugees as 'economic asset' rather than a burden. Our paper addresses the potential economic value of IDPs and urban refugees. To the best of the authors' knowledge, this is the very first attempt that utilizes 'Opportunity Tree' for IDPs and refugees. The authors hope that the paper will generate discussion and interest among peace scholars. The findings of this research paper will provide some further insight to other refugee crisis across the world.

Findings and Conclusions

There are three conclusions that can be drawn: Firstly, our research into the economics of IDPs and refugees provides convincing evidence that often the humanitarian aspect of welcoming refugees overshadows their long-run economic impact and their role as peace catalysts. Evidence shows that economic impact of re-settled refugees is positive. Secondly, the long-run economic benefits can be asserted as a new potential labor source for aging population, increase in household spending and therefore stimulation of the local economy, refugee owned business, and potential tax revenue source. Thirdly, refugees can also potentially play an important role in peace negotiations and post-conflict reconstruction in their countries of origin.

How does your research or creative work reflect the mission and core values of the university?

The shortage of Ph.D.-qualified accounting faculty has spawned proposals to mitigate the crisis, including the hiring of professionally oriented faculty and those with doctorates in fields other than accounting. Under new AACSB accreditation standards, member institutions enjoy increased flexibility in hiring faculty. This study explores the current standards of several accreditation bodies, which generally permit the hiring of JD-CPAs as credentialed accounting faculty members. The article discusses survey results of accounting educators (N=248) regarding the acceptance of JD-CPA credentials as an alternative to a Ph.D.-credentialed candidate. Respondents represent a wide array of institutions (research- and teaching-focused) and professional backgrounds. The survey results show that JD-CPA accounting educators are widely included among accounting faculties. Survey data also indicated a substantial endorsement of hiring JD-CPAs, albeit more so from respondents at teaching-focused schools. This study provides additional data to support the consideration of JD-CPAs for tenure-track accounting faculty positions.

Purpose of the Study

The purpose of this study is to explore accounting faculty attitudes on, and accreditation standards-related limitations to, the hiring of individuals holding a doctorate in law (the terminal degree of Juris Doctor) combined with professional certification in accounting (CPA or other designations) as a means of ameliorating the long-standing shortage of Ph.Ds. in accounting in the academic marketplace.

Rationale and Significance

The number of PhD faculty vs non-PhD faculty was not presented in our article.

A 2007 advisory paper on this issue stated that in 2004 there were 4,881 accounting faculty with PhDs and 17,610 accounting faculty members without PhDs. Using those numbers from 2004 gives 27.72% of all accounting faculty members with PhDs. [Advisory Committee on the Auditing Profession Department of the Treasury Washington D.C. December 3, 2007 Prepared by David W. Leslie Chancellor Professor of Education The College of William and Mary November 26, 2007]

Articles published since 2007 have continued to describe the PhD shortage in accounting as “acute” or “severe.”

Accreditation standards such as those of SACS and AACSB allow certain non-PhD terminal degrees to satisfy accreditation requirements. However, institutional biases in favor of the PhD degree might present an obstacle to widespread adoption of such a solution to the continuing shortage of accounting PhDs.

Description of Methodology

The survey instrument was piloted with 5 accounting faculty members. Their comments back to the author of the survey were taken into consideration when the survey was finalized. This piloting ensures at least a degree of face validity. Concerning reliability, the survey questions were not intended to form a scale measuring a single construct. As such, a meaningful numerical reliability coefficient cannot be calculated.

Findings and Conclusions

Besides demographic questions, the survey contained questions about the hiring of JD-CPAs for accounting faculty positions. One set of questions concerned the presence of JD-CPAs in the respondents’ departments, whereas the other set of questions concerned respondents’ personal opinions on the hiring of JD-CPAs. The departmental-related questions asked the number of JD-CPAs currently employed in the respondent’s department, the reasons JD-CPAs have been hired in the respondent’s department and the positions for which they were hired, the eligibility of JD-CPAs for tenure, and the courses taught by JD-CPA respondents. The remaining questions asked about findings from accreditation reviews (i.e., SACS, ACBSP, and AACSB).

The number of JD-CPAs employed was analyzed using one-way analysis of variance (ANOVAs) followed by Tukey’s HSD post-hoc tests (Ramsey and Schafer, 2012), with the institutional characteristics (see Table 2) serving as the independent variables. Chi-square tests of independence/association are also used in several instances to supplement the results of numerical data analysis. The accreditation-related questions were analyzed qualitatively due to the small number of affirmative responses. The questions concerning the respondents’ personal opinions on the hiring of JD-CPAs were analyzed separately using multiple regression analysis with respondent characteristics as predictors.

How does your research or creative work reflect the mission and core values of the university?

This proposal is based in the foundations of true and accurate research for the sake of the greater good. In this case, the greater good focuses on the health of employees and the success of employers. By learning more about our chosen topic and its repercussions, we are able to educate and inspire others to continue on to perform their own research. The research involved acknowledges the responsibility for ethical consequences of our ideas, actions, and the connection between formal learning and service to community. The implications of future findings could potentially spark a change in corporate culture and the nature of sleep and productivity itself. We as students of The University of the Incarnate Word have an obligation to prepare individuals for a life that is productive and responsible in an ever-changing world.

Purpose of the Study

The purpose of this study is to determine the relationship between the hours of sleep of employees in the United States and productivity in the workplace.

Rationale and Significance

This study analyzes the relationships between sleep and productivity as detailed by attendance and alertness at work. Previous studies indicate that those who sleep less than the necessary hours are prone to health issues and a lack of focus. Management teams and management executives, in order to curb the expenses incurred from illness and

tardiness, could implement initiatives as part of preventative health approaches. Other alternatives besides a reward-based system for wellness initiatives could include adding more breaks during the day or spaces that are conducive to quick naps. This study would be performed using a survey for respondents who choose to participate, which will allow respondents to self-report their sleeping hours. These results will be cross-tabulated with the respondent's usual shift hours and deviances in the beginning and end of said shift hours. It is imperative that respondents must have no unusual sleeping patterns as diagnosed by a doctor.

Description of Methodology

This study will focus on using quantitative methods, providing surveys to participants that will allow variables such as hours slept, amount of hours worked, and the times in which the participant began their shift. Other aspects of the independent variable, such as age and gender, will also be accurately measured with the same quantitative methods. Due to the nature of the study, quantitative methods are most suitable in order to measure responses from a medium to large sample size.

Findings and Conclusions

Our current study is a pilot study. We have intentions of completing this research and attaining a wealth a data using the aforementioned methodology. The data collected will then be presented in a concise format with accuracy and precision. Results will be available by the end of Fall of 2017.

How does your research or creative work reflect the mission and core values of the university?

This customizable ethics case based on a real-world ethical dilemma is designed for use in an introductory undergraduate or graduate ethics course. The case provides an opportunity for students to apply and extend ethical principles and knowledge in a practical real-world setting. Students consider a common ethical dilemma where personal and company interests are in conflict. This case is intended to challenge students to improve knowledge of the IMA's Statement of Ethical Professional Practice; understand the pressures and complexities associated with an ethical dilemma; apply ethical knowledge to a moral dilemma when no direct or obvious response is evident; and analyze alternative responses and evaluate the potential consequences of their response when confronted with an ethical dilemma. This case reflects the mission of the university in that the case allows students to develop life long-learning skills in relation to integrity and professionalism as a future accountant. The case also focuses on the university's "communication of truth" in that all accountants should evaluate various alternatives when faced with an ethical dilemma in the business environment and maintain integrity and truthfulness.

Purpose of the Study

This case is designed for use in a graduate ethics course utilizing the case method or any of the four options discussed in the teaching notes for incorporating this case into the classroom. The case provides students an opportunity to extend and apply ethical knowledge in a practical real-world setting (i.e., determining the appropriate course of action based on the Institute of Management Accountants' (IMA) Statement of Ethical Professional Practice).

Knowledge- Use of knowledge of the IMA's Statement of Ethical Professional Practice to elucidate the four standards of ethical and professional practice.

Understanding- Understand when confronted with an ethical dilemma that pressures exist outside of the business environment (e.g., financial pressure, family, community).

Application- Apply knowledge of the IMA's Statement of Ethical Professional Practice to a real-world ethical dilemma.

Evaluate and analyze- Evaluate and analyze the various

potential courses of action and the likely potential consequences associated with each response.

Rationale and Significance

This case simulates a real-world situation where students are forced to evaluate potential responses (remain silent, resign, or escalate) to an ethical dilemma vis-à-vis the IMA's Statement of Ethical Professional Practice. The value of this case is enhanced when students review the likely consequences of each response.

Description of Methodology

Earlier versions of this case have been used by numerous instructors in several courses at multiple public and private universities in the Southwest to validate the case objectives. Students during the fall semester 2016 were anonymously surveyed to compile feedback on case effectiveness and make improvements to the case. The case was discussed by four instructors in two undergraduate introductory ethics classes, one undergraduate audit class, and one introductory managerial accounting class. Approximately 85 students completed the case with a total of 45 students submitting the survey. A five-point, Likert-type scale was used to score survey results where 5 represented "Strongly agree," 3 represented "Neither Agree or Disagree" and 1 represented "Strongly Disagree".

Findings and Conclusions

Outside of the learning objectives, the case provides the following outcomes and contributions:

1. Exposing students to a real-world ethical dilemma
2. Creating an understanding of some of the pressures that employees face when determining a potential response to an ethical dilemma
3. Evaluating the IMA's Statement of Ethical Professional Practice relative to potential responses to an ethical dilemma
4. Encouraging critical thinking skills for potential responses and consequences for each

The objective of the case is to expose students to real world ethical dilemmas that do not exhibit a clear and easy answer. Accounting students need to practice strengthening their ethical decision-making skills before becoming a Certified Management Accountant (CMA). Additionally, the case allows students exposure to other perspectives outside of their point of view. The case provides an opportunity for an in depth discussion regarding how the ethical choice is often the hardest decision to make.

How does your research or creative work reflect the mission and core values of the university?

This research proposal seeks to understand the relationships between an employee's rank within a company and their overall wellness. Every job has its unique stresses and challenges which in turn play a role in the employee's personal life. Employees are the most valuable asset in any company, and the results of this study could lead to a better understanding of how to better manage the human resources of a company to maximize productivity while also creating a healthy and happy workforce. UIW's founding Sisters came to San Antonio to minister to the sick and poor, so what better way to celebrate their spirit than to search for ways to increase the health and happiness of employees

Purpose of the Study

Different positions within a company require different skills and strengths from the employee to properly perform the job. Additionally, each individual has a different relationship with their job and how that job affects their life and personal wellness. The purpose of this study is to determine if there is a relationship between an employee's rank within a company and that employee's overall wellness.

Rationale and Significance

Employee health is a major concern for all businesses, both large and small. There are various factors associated with the overall health of a business's workforce, all of which need to be considered when planning and computing current output as well as projecting for the future. An employee's rank may have unique challenges to employees based on that position and the effects on their overall health are particularly important as it can change over time. Understanding these effects

can help a company understand its workforce better, their productivity, and can help develop plans to reduce costs in the near and long-term.

Description of Methodology

The study will rely on quantitative data collected with a survey in the form of a questionnaire. The data will have no treatments applied, and the primary purpose of the study will be the examination of relationships as it applies to the research question. The survey will be conducted once and then analyzed, with participation solicited via email among employees of the company.

The target population of the research will be exclusively employees within a southwest U.S. healthcare company with approximately 50,000 potential participant employees. An email will be sent to all employees of the company through the HR department including a short briefing of the research and a link which leads the potential participant to the questionnaire.

The questionnaire will consist of four sections with multiple questions. The participants will be emailed the survey, and they will be given three weeks to complete the survey. Reminder emails will be sent at the beginning of each week to encourage maximum participation.

The Chi Square Test of Independence will be used to analyze the results of the survey. Once the research is completed, the results will be presented in form of a management report to describe significant findings of the survey.

Findings and Conclusions

The proposed research is in progress, to be completed at a later date. Results will be updated in the future.

How does your research or creative work reflect the mission and core values of the university?

The study of Creative Self-Efficacy (CreaSE) as it applies to Information Systems directly aligns with the mission of the university to cultivate the values of life-long learning and thoughtful innovation in students and professionals in the field.

This project aims to develop methods of increasing confidence in students' and professionals' ability to solve unstructured problems using creative technological solutions. These methods are needed in response to the ongoing paradigm shift in the world of business in which success depends upon the ability to confidently approach new and unstructured problems.

In this study, we develop a formal scale for measuring CreaSE.

Purpose of the Study

This paper details the steps taken to develop and validate a theoretically-based measure of Creative Self-Efficacy (CreaSE) as it relates to the IS field. Following detailed procedures outlined for construct development, we specify CreaSE as a second order formative construct with five reflective sub-constructs based on an individual's belief in their (1) cognitive ability, (2) domain knowledge, (3) training (including business, technology, and data skills), (4) "people" skills, and (5) affect toward creative problem solving. Our validation process includes six distinct data collections across a variety of populations—including business students, IS students, business professionals, IS professionals, executives, and university professors—which allowed us to repeatedly refine the scale. In addition, we validate our instrument in a nomological model that predicts coping efforts and performance on creative tasks.

Rationale and Significance

A key characteristics of high performing information systems professionals is their ability to be creative as they build systems to solve new or

unstructured business problems. However, it is not enough to merely "be" a creative person. A good IS professional must also have confidence in their own creative ability to reach their potential. Otherwise, they may not put forth the "coping" efforts needed to solve problems. Indeed, sometimes the belief in one's abilities has a greater effect on performance than one's actual ability. We posit that creativity is a primary facet of IS professionals' competencies, as those who can utilize reflection, imagination, and innovation with technical excellence may flourish solving future IS problems. However, creativity alone is insufficient to ensure success. Rather, self-assurance and faith in one's ability to effectively summon creativity in nascent contexts creates the inertia necessary to capitalize on creativity.

Description of Methodology

To generate a valid instrument, we followed the rigorous procedures and methodology outlined by MacKenzie et al. This methodology includes ten steps that we follow in detail through the remainder of this paper: 1) form a conceptual definition of the construct, 2) generate items, 3) assess content validity, 4) specify the measurement model, 5) collect data to pre-test, 6) scale refinement, 7) gather new sample and re-examine scale properties, 8) assess scale validity (repeat 6-8 as needed), 9) cross-validate the scale with samples from different populations, and 10) develop scale norms. Our process includes six data sets collected during refinement. Participants include business and IS students, online respondents, university professors, IS executives, and IS professionals.

Findings and Conclusions

We successfully validated a scale for measuring CreaSE. The validated instrument is a second-order formative measure with reflective first-order sub-constructs based on belief in cognitive ability, affect, domain knowledge, skills, and understanding of people. In addition, we found CreaSE to be positively related to both coping on creative tasks and performance on creative tasks.

How does your research or creative work reflect the mission and core values of the university?

By focusing on the digital divide in this paper we hope to focus on the university's core values of education and service. This paper hopes to shed light on a condition of exclusion in technology availability so that education and service can be applied to those who need greater access to technology.

Purpose of the Study

The ubiquitous nature of technology today fosters the perception that its use as a means of information sharing and gathering occurs equally across resources. There is however a digital divide which commonly refers to the socio-economic, ethnic, educational, and cultural inequality of access and use of digital technologies in society today. Less clear in the literature is as Digital natives and Immigrants age and enter the workforce, how their age will affect their use of technology as a social and information gathering resource (Herring, 2008). Will advances in mobile technologies and age extend the digital divide or will they continue to be technology zealous? Based on data analyzed from wave 6 of the World Values Survey (WVS) a significant difference exists between the generations in the use of different information sources used for information gathering and sharing as they age.

Rationale and Significance

The inequality of access and use of digital technologies has come to be known as the digital divide, and the phenomenon first began to be talked about back in the 1990s when personal computers became available (Strover, 2014). While technology such as the Internet has connected us worldwide, there is also the aspect of how technology has divided us (Hilbert, 2011). The digital divide has revealed more than the “haves” and “have nots”; it has become an indicator of how information and communication capacity are connected to models of access, usage, and impact of digital technologies (Hilbert, 2014).

Description of Methodology

Data used in this study were gathered from Wave 6 of the World Values Survey (WVS). The WVS is conducted by a global network of social scientists that survey people on all continents about their basic values and beliefs (World values survey, 2012). Knowledge Networks (KN) recruit a research panels through probability-based sampling that is representative of the of the entire U.S. population. In this manner, households are selected and then contacted by email when they are needed to complete a survey (World Values Survey, 2012).

To collect data, interviews are carried out with nationally representative samples of the population. There were five waves of surveys conducted between 1981 and 2008. Wave 6 data was collected between 2010 and 2012. There were 2,232 responses, 1084 males (48.57%) and 1148 females (51.43%), in the Gender Values section of the sixth American wave of the WVS. Once data was collected, independent t-testing and descriptive statistics are used to draw conclusions.

Findings and Conclusions

The generational divide, defined as the disparity in access to and use of digital technologies between the young and old (Livermore, 2011), will most likely continue into the future as new technologies are adopted. Within this study, the researchers have narrowed the existence of the generational divide to the single factor of age. Results of the study show a significant difference at the $p < .01$ level amongst all ages included in the study. Individuals aged 35 and up who use daily newspapers, TV news, mobile phones, printed magazines, and radio news are significantly different at the $p .01$ level than those individuals aged 18 -14 years. Significant differences did not exist however at the $p < .01$ level for all age groups included in the study when the source of information was email or talking with friends and colleagues.

How does your research or creative work reflect the mission and core values of the university?

This research reflects the mission of the University of the Incarnate Word which promotes research and education excellence. It reflects the core values of the University that considers innovation one of the main values. This research falls into the two categories of education and innovation by investigating a highly important topic in the information systems today. This research reflects an example of the enormous success of the University in achieving its main goals in student's development spiritually and intellectually.

Purpose of the Study

The purpose of this study is to understand the impact of language variation on text analysis, and how to use the results of the study to improve the accuracy the collected data.

Rationale and Significance

Text mining plays a key role in big data analysis. It is the extraction of the knowledge expressed in textual format in order to conduct sentimental, statistical, and predicative analysis using machine learning algorithms. Since text analysis relays

heavily on the nature of the collected data, it is very important to examine different methods that can increase the accuracy of this data. This study examines the impact of changing the language of expression on users' responses to events.

Description of Methodology

The study will use extracted data from Twitter to experiment how multilingual users respond to a specific event that is posted on social media, in two different languages. Users' responses in language (A) will be translated and compared to their responses in language (E). Using machine learning techniques, the study will conduct sentiment classification in comparing users' responses as an approach to fulfill the purpose of the study.

Findings and Conclusions

The initial results suggest that multilingual users' responses in language (A) contain significant changes in compare to their responses in language (E). The changes effect the objectivity of the responses and contain more specification, which can have a significant impact on further analysis.

How does your research or creative work reflect the mission and core values of the university?

Promoting peace is a simple act of preserving creation. By the same token to ignore the suffering of others is an offense against the Creator. Therefore, investigating the underlying relationship between Economics & Peace is of special interest to UIW Mission and to our Campus. Studying Economics & Peace shows our dedication to the cause of peace and non-violence.

Purpose of the Study

The objective of this paper is twofold: The first part, peace through commerce, demonstrates evidence between economic stability and improved peacefulness. The evidence indicates that the relationship between economic prosperity and peace constitutes a salutary circle. Indeed, peace is an indispensable prerequisite for economic stability among nations. The second part, peace through education, illustrates how to incorporate peace into the undergraduate (UG) Economics curriculum. This objective is in line with the goal of the Global Campaign for Peace Education (GCPE), an initiative of the International Institute on Peace Education (IIPE), of the introduction of peace into all spheres of education.

Rationale and Significance

Regardless of the progress made in science and technology, the modern world continues to suffer from wars and conflicts. While national, ethnic, religious or ideological differences may be contributing factors, conflicts fueled by economic injustice has re-emerged as a fundamental challenge to World peace. A campaign to facilitate the introduction of peace education into all educational institutions was called for by the Hague Appeal for Peace Civil Society. Consequently, a growing number of higher education institutions have come to the conclusion that we need to incorporate peace into the

curriculum in order to educate students to work towards the peaceful solutions of world problems. Responding to these challenges, the author of this paper reaches out and proposes a new concentration in Economics & Peace (ECON & PEACE, herein after) at UIW. The current paper offers a new direction and therefore claims ownership and responsibility of promoting peace among economists.

Description of Methodology

Economics is a discipline grounded in empirical evidence. Economists use theories and models to explain and make predictions about human behavior. Following this principle, in this paper I have integrated economic theory, empirical methods, and policy analysis. The poster will display two major components: (i) A visual inspection of two World maps, GDP Per Capita and Global Peace Index, indicating how two different variables (income and peace) confirms the underlying relationship between Economics and Peace. (ii) A detailed display for ECON & PEACE program at UIW.

Findings and Conclusions

There are two conclusions that can be drawn: Firstly, economics and peace are mutually reinforcing, and the relationship between economics and peace is indisputable. There is an immediate upsurge in economic activity associated with the restoration of basic security. Secondly, while there is overwhelming evidence that validates the undeniable relationship between Economics and Peace, there are not enough educational opportunities in Economics and Peace studies. At a time when conflict regularly dominates news headlines, there is no better time to train the next generation of peace makers. The goal of the ECON & PEACE program is to educate the next generation of peace builders.

How does your research or creative work reflect the mission and core values of the university?

Employee satisfaction is a major concern with businesses in today's market. Organizations are looking to increase job satisfaction so that they can maintain high productivity, and keep the employee turnover low.

Purpose of the Study

The purpose of the study is to determine whether there is a relationship between employee demographics and employee satisfaction for students enrolled in an MBA program at a faith-based, private university who are also employed full-time.

Rationale and Significance

Employees are the most significant factor and the only sustainable long-term competitive advantage of an organization. One facet of employee participation phenomenally in the organizations is job satisfaction, employee job satisfaction can improve service quality. In this paper, we are studying the relationship between employee demographics and job satisfaction, an effort to make policies that are more effective for employees and quality of work for organization.

Description of Methodology

Method and Research Design: Quantitative data is analyzed by using correlation designed survey. This will give as much information as needed of if there is a correlation between employee satisfaction and

employee demographics.

Sample: MBA students at private faith-based institutions who are employed full time are the participants to sample for this study. The sampling frame will be limited to students who are currently working during an MBA program. The students can either be taking a minimum workload of 3 to 6 hours or be enrolled full time in nine or more hours. Data collection: The data will be collected through quantitative surveys that will be given to a sampling frame of MBA students who are working full time. Data Analysis: CHI square test will be the statistical

test used to analyze the data. Chi square test is the appropriate test to use because this is a correlation study. This study will allow the studier to know if there is in fact a correlation between the two variables. All results will presented through graphs that include scatter-plots and bar graphs. The data will be presented in two forms of descriptive statistics, those being pie charts and histograms.

Findings and Conclusions

Demographic attributes have robust predictive qualities for impacting employee behaviors, which ultimately leads to job satisfaction. All the demographic attributes does not help in boosting employee satisfaction in the organization.

How does your research or creative work reflect the mission and core values of the university?

This paper is discovering the students' perspectives in educational technology tools development in the Economic area. The paper is trying to close to the trend of today's educational innovation and uncover the needs of students. The article also is trying to emphasis on understanding student's opinion on educational technology tools to help professors commit to educational excellence in Economics.

Purpose of the Study

The purpose of this article is exploring college students' perceptions of technologies used in the economic classroom, the research emphasis students' respondent on different technology used in the classroom.

Rationale and Significance

Despite the large body of literature on the pros and cons of incorporating technology into classrooms, the efficacy of such pedagogy in terms of students' learning outcomes is not clear (Kader, 2012; Cameron, 2012). More importantly, students' opinions about technology use are under-researched.

Description of Methodology


An in-class survey was distributed to undergraduate students enrolled in introductory and upper-level economic courses at two private liberal arts colleges – The University of the South (Sewanee) and University of Incarnate Word in the academic year of 2016–2017. The survey was administered during the week before final exams. To meet Institutional Review Board (IRB) standards, students understood that participation in the survey was completely voluntary and there would be no negative impact on their grades if they did not participate.

The sample size is 247 participants. Researchers conducted data collection twice. The first data collection was conducted in Spring, 2016; there were six classes with 87 students. The second data collection was in Fall, 2016; data were collected from 8 classes with 160 students. This paper used

several statistical analyses to analyze the relationship between students' demographic features and their perspectives on technology. The analyses used including descriptive statistical analysis of means, one-way analysis of variance (ANOVA), t-test, correlation analysis, and multiple regression analysis.

Findings and Conclusions

Overall, the results showed that UIW students attributed more importance to all those questions than did the Sewanee students. However, the Sewanee students attributed more importance to using shared documents than did UIW students. Compared to Microeconomics students, Macroeconomics students cared more about using online course management system. International Economics students paid more attention than Microeconomics students to using online testing. Students who lived within walking distance from school cared less about the long-distance technology which can access or interact with the classroom. When the respondents' Father had graduate school education, the participant attributed less importance to education technology tools used for the class. Females assigned more importance to online discussion and online testing than did males. The regression also indicated that when the respondents' school year was higher, they assigned less importance to post video on online course management system.



ILA FAYE MILLER SCHOOL OF NURSING AND HEALTH PROFESSIONS

Research Week 

The goal of the Ila Faye Miller School of Nursing and Health Professions is to provide an excellent student-centered education that will promote leadership development among students in each of the health disciplines.

Exploring Nurses Behaviors in Response to Technology Through the Lens of Complex Adaptive Systems: A Mixed Methods Approach

Browne, J. Ph.D., RN-BC, CCRN

How does your research or creative work reflect the mission and core values of the university?

The research being presented relies on bottom up strategies to explore patterns and relationships in nursing workflow and patient care. The research exemplifies the kind of innovative design encouraged in the university core values. The overarching goal of this work is to gain a better understanding of nursing work in order to improve efficiency, quality and patient safety

Purpose of the Study

The purpose of this research was to model nursing work and health information technology (HIT) workarounds performed by nurses in order to gain a better understanding of their nature, precursors and consequences. Finding new ways to uncover variables, patterns and relationships will support the development of more accurate frameworks for study. A clearer understanding of these relationships is imperative to the improvement of nursing efficiency, quality and patient safety

Rationale and Significance

Health Information Technologies (HIT) are used in hospitals in order to achieve organizational goals and improve safety, however HIT has also introduced new problems and safety risks. Literature describes poorly designed systems, new error types and problems that are minimized and under-reported. Non-care related activities have been found to increase with HIT; increasing workload and reducing a nurses' time at the bedside. In many cases, nurses have developed workarounds in response to this incongruity between technology and work processes.

Nursing research methods have relied on linear cause and effect approaches that do not have the capacity to describe the complexity of nursing work. In actuality, nursing work behaves in a manner consistent with non-linear complex adaptive systems. There is scant research that has investigated nursing as a complex adaptive system, but it is necessary in order to get a clearer understanding of nurses' behaviors in response to HIT.

Description of Methodology

This study was conducted in collaboration with the American Association of Critical Care Nurses and

approved by The University of Texas Health Science Center IRB. Registered nurses (307) responded to a survey consisting of items measuring nursing work, HIT problems, workarounds and open ended questions. Systems thinking was the formal process used to combine qualitative and quantitative methods in order to examine variable relationships. Modeling of negative and positive feedback loops was essential to the process.

This study focused on understanding the nature of technology-related nursing behaviors in a CAS. The goals of data collection and analysis were to develop variable matrices from which causal loop diagrams (CLD's) could be modeled. CAS research focuses on the numerous ways that methods can work together, and is considered an activity, not a product. The methods in this study could not have been fully planned, and switching methods (allocate and reallocate attention) and approaches was an intentional design activity.

Qualitative data was coded and transformed into binary matrices. Numerous quantitative analyses concurrently supported and guided this inquiry. Causal loop diagrams of multi-level interfaces were then created from binary matrix reports and were used to explore and confirm variable relationship patterns.

Findings and Conclusions

The CLD's provided evidence that HIT influences nursing behaviors, creating positive and negative feedback loops that affect efficiency, quality and patient safety. The multi-level models displayed the influence that the patient and organization can have on nursing behaviors. Interestingly, it was noted that education and training did not influence behaviors, yet some patient safety protocols and organizational requirements had negative associations.

Because technologies and nurse behaviors change so rapidly, mixed methods allowed for the identification of issues, relationships and unintended consequences. Variables were added or modified during the study, and their characteristics could change or could behave as dependent and independent variables simultaneously. Using mixed methods through the lens of CAS allowed us to explore HIT integration without rigid, inflexible research plans, approaching the research as a process. This paper introduces one approach to analysis of work complexities and provides an additional way to integrate qualitative inquiry into informatics studies.

How does your research or creative work reflect the mission and core values of the university?

With our research, we hope to provide stress education to our fellow peers and classmates in order to expand life-long learning. We will be truthful in our service to provide support, communication, and innovation amongst our community. We hope to inspire self-realization and enlightenment for the greater good.

Purpose of the Study

The purpose of this study was to evaluate stress perception among college students in a South Texas university.

Rationale and Significance

An individual's stress perception can have both physiological and psychological effects on a person's life (Baghurst, T., & Kelley, B. C., 2014). Some factors that can contribute to increased levels of perceived stress include low family income, unhappy home life, and poor social relationships (American Psychological Association, 2017). This could lead to an overall impact on quality of life. Numerous studies have shown that there are high levels of stress perception among college students (Beiter, R., Nash, R., 2015). Even though there are high levels of perceived stress among college populations (Robotham, D., & Julian, C., 2006), very few students will actively utilize available resources. This may be a result of students' lack of awareness related to resources available to them (May, R. W., & Casazza, S. P., 2012).

Description of Methodology

Prior to collecting any data IRB approval was obtained from the University of the Incarnate Word. College students enrolled at a south Texas

university were asked to complete the Perceived Stress Scale (PSS). The PSS scale is a survey that has been used to measure perceived stress among college students (Dusek, J., & Wilcher, M., 2002). Researchers utilized the institution's student engagement center to recruit and invite college students to participate in this study. Students were provided laptops to complete the online Survey Monkey consent form and PSS. For this study, students enrolled in a south Texas Hispanic serving institution were utilized to measure stress perception. There were 41 participants; to maintain anonymity no descriptive data were collected. The 10-question survey was administered from October to November 2017. Mean analysis was utilized for each of the survey questions.

Findings and Conclusions

This study found that 73.69% (42.11%- very, 31.58%- fairly often) of students identify as being nervous and stressed. This outcome supports previous data that suggests that college students are at a higher risk of stress-related health implications. The increased stress perception may be associated with the timeframe in which the survey was completed. Within a college semester, November tends to include finalizing course projects, papers, final exams, etc. This can be perceived to be a heightened stress time. Furthermore, ~89% (51.35%-sometimes, 27.03%-fairly, 10.81%-very often) of students acknowledged they felt upset with unexpected events which supports the 81.5% (42.11%- sometimes, 26.32%%- fairly, 13.16%-very often) of students that identify their inability to control the important aspects of their life. Since stress perception is individualized, future research should focus on specific stressors and different semester timeframes.

How does your research or creative work reflect the mission and core values of the university?

This presentation will help University of the Incarnate Word faculty, students and community better understand challenges faced by students dealing with Post Traumatic Stress Disorder (PTSD) and how it impacts their learning and success in school. The two lead authors are U.S. Armed Forces combat veterans with an intimate knowledge of how PTSD impacts students. The presentation intends to help the UIW community discover the truth about the unique challenges that students dealing with PTSD encounter and to develop a greater mutual respect and understanding for these students.

Purpose of the Study

An estimated 5.2 million Americans deal with Post Traumatic Stress Disorder (PTSD). PTSD can be brought on by several different extreme traumatic stressors. The presentation will inform students and faculty in the UIW community learn how to support students dealing with PTSD and help these students

successfully deal with their different challenges and find academic success.

Rationale and Significance

This presentation will help the University of the Incarnate Word community better understand challenges faced by students dealing with Post Traumatic Stress Disorder (PTSD) and how it impacts their learning and success in school.

Description of Methodology

The two lead authors of the presentation are U.S. Armed Forces combat veterans with an intimate knowledge of how PTSD impacts students. The presentation will present a review of the current academic literature and first hand experiences related to PTSD and how they impact student learning and performance.

Findings and Conclusions

With therapy and support students with PTSD can learn to deal with their past traumas, relax and be successful at school and work.

Failure to Rescue: Improving the Process for Earlier Recognition of Declining Patient Status

Cavazos, Jacob BSN, BS, RN, CPN ; Gillespie, Kathryn JD, RN, CCM ; King, Kimberlea BSN, RN ; Gunter, M. Danielle PhD, RN, CPN

How does your research or creative work reflect the mission and core values of the university?

Improving the recognition of patient health decline reflects the mission of UIW by ensuring that all patients receive the necessary care to keep them safe through innovation in staff education techniques, and increasing collaboration among members of the healthcare team. This will work towards improving patient/family quality of life, and nurses' confidence in the work they do for their patient, which in turn, improves their understanding of their service towards the health of our community.

Purpose of the Study

The purpose of this project was to determine the frequency, rationale, and other causative factors for delays in initiation or complete omission of a rapid response team (RRT) when a change in patient status leading to patient demise warranted it.

Rationale and Significance

In spite of the push toward safe, quality patient care within the inpatient setting, recent estimates suggest that injury resulting from preventable medical error is the third leading cause of death in the United States (Makary & Daniel, 2016). Data provided by the facility's quality department prior to our project demonstrated that 43% of RRT's are initiated well after the need has been identified. This lack of nursing intervention is considered a medical error of omission. This is an unacceptable compromise in patient safety and warranted the need for further investigation. Rapid response teams have been proven as effective in reducing mortality and patient severity/injuries when recognition of patient decline is done in a timely manner (Allen, Elliott, & Jackson, 2017). They are precursors to full patient resuscitation and are meant to intervene before resuscitation is necessary. They are a tool for frontline nurses to use in the hospital setting to receive additional expertise and medical assistance quickly and early when a nurse recognizes a deterioration in patient status. Thus receiving guidance and orders for intervention prior to the need to call for the resuscitation team and move the patient to the intensive care unit. When there are questions or delays in activating the rapid response team, patient status can decline and injury/mortality rates can increase (Allen, Elliott, & Jackson, 2017).

Description of Methodology

The microsystem assessment using the Dartmouth 5 P Assessment Tools was completed over an 8 week period. The 5 P assessment includes a thorough review of factors affecting the types of patients cared for, the credentials and volume of staff/professionals on the healthcare team, and processes/procedures normal to the function of the unit. This was completed through over 100 patient chart reviews for factors affecting delays in nursing interventions, 50+ hours of nursing practice observations, descriptive surveys of staff, and interviews of several staff, the nursing unit and organization leadership. Observations also included discussions with institution professionals and attendance at department meetings, such as the resuscitation committee which were integral to data collection.

Findings and Conclusions

The actual volume of rapid response delays that led to full resuscitations was 18 out of 43 (42%). The assessment identified an overall lack of didactic and simulation education related to patient rescue, and the variation in practice related to activation of RRT. They feared negative consequences related to perceptions of their inexperience; so they did not intervene at all. Staff nurses were unclear when to intervene and when to wait for physician guidance. Conflicts related to RRT policy construction and interpretation played a key role in delays in calling the RRT. The policy is unclear and contradictory. Also, lack of leadership/mentoring for less experienced nurses exacerbated the clinical problem. The staff was relatively new to the nursing field and felt isolated and somewhat ostracized in their practice. Their lack of ability to recognize the need for intervention was a key factor. Recommendations for improvement include using a competency framework to optimize staff education and the use of Team STEPPS to improve clinical practice, communication, and patient safety (Harvey, Echols, Clark, & Lee, 2014). Efficacy of the interventions should be tracked by frequency of RRT, code blue events, and occurrence reports that identify if RRT is being initiated sooner. Nursing confidence and satisfaction related to identification of patient deterioration, as well as comfort in activating RRT will also be assessed

How does your research or creative work reflect the mission and core values of the university?

Through this perspective piece, an educated opinion on radiation safety and radiation biology can be developed and properly implemented into didactic and clinical practice in order to further educate future students and the general public. Through this service, the negative perspective on radiation exposure can be innovated into one that explores the possible detrimental as well as beneficial effects of radiation exposure.

Purpose of the Study

The purpose of the paper is to provide a students' perspective on radiation safety practices in nuclear medicine. In order to form our perspective, we utilized different avenues of information. The perspective is based on text reading, database research, lecture notes, and clinical experience. As students, we are instructed on the guiding principle of radiation safety "As Low As Reasonably Achievable" (ALARA) in both classroom simulated cases and clinical experience. The basis of the ALARA principle is based on the minimization of radiation exposure to both the occupational worker and the public. As students sitting in the classroom ALARA is a method of practice to minimize negative health outcomes from daily radiation exposure. In the clinical setting, the intensity of ALARA is overshadowed by the volume of patients in the nuclear medicine department.

Rationale and Significance

Studies on the effects of low-level radiation increased the fear of the general public about the long-term consequences of radiation exposure. The fundamental principle everyone understands is to reduce unnecessary radiation exposure. This is taught in schools, and can be applied to patient care and occupational habits in order to keep exposure at a minimum. As a student and future occupational worker, it is the responsibility of the technologist to be aware of what is known about the effects of long-term exposure to radiation, as well as observe the practices and guides implemented in a clinical setting that reduce radiation exposure. This will provide to the public the information necessary for them to develop an opinion on radiation exposure.

Description of Methodology

In the planning of the student perspective paper, we defined the objective of the paper and identified the data sources. Our objective is to bring awareness of the importance of radiation protection practices in the clinical setting. In our quest, we broke down our data collection into three categories: database search, textbook assigned readings, instructor lecture notes and observation of eight clinical preceptors at two different clinical sites. The database's search consisted of key terms such as; radiation safety, harmful radiation in clinical practice, nuclear medicine, ALARA, and employee radiation exposure. We chose peer-reviewed journals as they have validated data. Once the articles were selected for review we proceeded in consolidating the results based on the descriptive categorization of the papers by qualitative or quantitative analysis. We also pooled our observation notes on the preceptors into three categories; hot lab, imaging room, and inpatient room.

Findings and Conclusions

In the first semester of the UIW Nuclear Medicine program, students are required to take a radiation safety course where they are taught concepts such as ALARA, federal & state regulations, safe-handling, and measurement of radiation sources. The following semester, students begin to apply and compare radiation safety practices in a clinical setting.

It came to no surprise that in the clinical setting, not all practices of ALARA are being fully implemented due to increased patient volume and demand for results from physicians. However, the preceptors we observed practicing this are highly experienced technologists with expert skill and awareness of their abilities. Other methods of reducing exposure included wearing dosimetry badges and implementing rotational shifts within the nuclear medicine department. It is also important that the technologist explain the principles of ALARA to a patient undergoing a procedure in order to reduce the exposure to the outside public such as family members and even pets.

Although what is taught in class doesn't necessarily reflect what is practiced in a clinical setting, both share a common goal: efficiently work with radioactive materials to reduce exposure to oneself and others.

How does your research or creative work reflect the mission and core values of the university?

Inspired by the healing hands of Jesus Christ we've sought to assess the impact that the profession of athletic training can have in supporting military readiness of our Air Force service men and women, a population less commonly served by this profession.

Purpose of the Study

This project was designed to evaluate the operational and cost impact of embedding certified athletic trainers (ATCs) in a U.S. Air Force training squadron. As we complete 24 of our 30 months on base, we are moving to expand and support athletic trainer integration within the military by developing a post-certification, medical residency for athletic trainers. This presentation seeks to highlight the professional impact of the study and its results to date as well as prospective future impacts that the UIW collaboration can have in supporting academic programs and the profession of athletic training.

Rationale and Significance

As the leading contributor to missed military training time and medical attrition from training, musculoskeletal injuries significantly affect operational readiness. Reducing injury morbidity among military recruits could minimize disruptions in the training pipeline, decrease the associated costs, and improve the health and fitness of individuals entering the armed forces.

Description of Methodology

An athletic training room staffed by two ATCs was opened near the end of 2015 in the 323 Training Squadron of U.S. Air Force Basic Military Training, Joint Base San Antonio-Lackland, Texas. Musculoskeletal and overall attrition rates, on-time

graduation rate, failure rate for final physical fitness assessment, healthcare utilization for injury, stress fracture rates, and per capita injury-related costs were calculated for the intervention squadron and compared to two control squadrons without access to ATCs. This population-based intervention trial profited from extant random allocation of recruits into the three squadrons. Preliminary analyses for

the first eighteen months of the program (January 1, 2016 through June 30, 2017) were conducted for this abstract.

Findings and Conclusions

During the first 18 months of the study (1 Jan 16 – 30 Jun 17), overall attrition was 16% lower and musculoskeletal attrition was 30% lower in the 323 TRS, as compared to the control squadrons—both of which are statistically significant. The risk of referral to Medical Hold was 36% lower and statistically significant.

Overall attrition RR=0.85 (0.77, 0.92);

Musculoskeletal attrition RR=0.70 (0.56, 0.89);

Med Hold Referrals RR=0.64 (0.56, 0.73)

In the first year the program, the 323rd supported 27 more trainees through graduation. In the first six months of our second year we demonstrated 22 more trainees successfully completed BMT showing the learning curve continues. The projected financial cost avoidance due to attrition when the program is expanded to all six training squadrons is over \$7 million dollars annually. We discuss the implications and potential pathways forward for the US Air Force, UIW, and the athletic training profession.

The impact of multi-modal linguistically appropriate education on 30-day kidney transplant readmission rates

Dols, Jean Dowling; PhD, RN, NEA-BC, FACHE; Katie Chargualaf; PhD, RN, CMSRN; Amanda Spence; RN; Megan Flagmeier; BSN, RN; Megan Morrison; BSN, RN; Amy Timmons; BSN, RN; & Rachel Villacorta

How does your research or creative work reflect the mission and core values of the university?

This study was designed to assist kidney transplant patients to attain and maintain an improved state of health by aligning educational materials and strategies with the population's health literacy level, which is a reflection of the University's core values of education and innovation. In partnership with staff nurses and nurse educators, nursing faculty and students re-envisioned a significant part of the transplant care process to better serve the needs of patients from all cultural backgrounds. In doing so, information may be applied beyond the care setting to assist other family members or the community at large.

Purpose of the Study

The purpose of this study was to determine whether educational design using linguistically and literacy level appropriate materials in a multi-modal methodology reduced 30-day readmission post kidney transplant for adults 18 years of age and older in a predominately Hispanic Southern U.S. population. The research question guiding this study was: Does multi-modal linguistically appropriate kidney transplant education, with less complex educational materials in both language level, layout, size, and methods, reduce 30-day readmissions post kidney transplant?

Rationale and Significance

As patient diversity in the U.S. grows health care practitioners must provide culturally competent care to reduce health disparities. One method of improving health outcomes is to narrow the health literacy gap through robust health education efforts. Health literacy is the ability to use information provided to return to good health (Friedman & Hoffman-Goetz, 2006). A patient's level of health literacy is impacted by their linguistic skills and cultural background (Singleton & Krause, 2009). It is essential to customize education materials to maximize the patient's ability to understand the instructions key to attaining and maintaining health (Badarudeen & Sabharwal, 2010).

Description of Methodology

This correlational study with retrospective data collection analyzed the impact of a revised education intervention, compared to the prior education intervention, on 30-day readmissions. Patients 18 years of age and older, admitted to the study hospital for a kidney transplant between 01/2017 and 01/2018, provide the population of study. . Each kidney transplant patient who was approved for the kidney transplant program received an abbreviated education sheet written in English and/or Spanish (as appropriate) at a 2.6 reading level. The nurses used repetition, visual (Education Poster), and auditory methods to introduce the patients to the information required to understand their medications, transplant "dos and don'ts", and other factors needed to stay healthy post-transplant. The variables were: 30-day readmission, prior education process, and defined elements of the revised education process (language level, layout, size, complexity, and methods). The PI and CoPIs calculated the findings using SPSS. The impact on the readmission rate was measured following the introduction of the revised education, as well as evaluating the risks and causes of the readmissions.

Findings and Conclusions

The first six months of the study resulted in a total overall reduction in readmissions from 21.9% to 19.8%. Cadaveric donor kidney transplants reduced from 29.5% to 17.8%. Live donor kidney transplant readmissions did not decrease in the first six months of the study. Additional emphasis on assuring both caregiver and patient have an understanding of the key factors to achieve and maintain good health were initiated.

There has also been an increase in physician satisfaction related to the retention of knowledge of key factors to achieve health. Nursing commitment to patient care increased, as measured by Hospital Consumer Assessment of Healthcare Providers and Systems. Additional findings from the first year of the study will be available by December 2017 and presented on the poster.

Measures of Excellence in Nurse Managed Health Centers

Dols, Jean Dowling; PhD, RN, NEA-BC, FACHE; Weis, Karen; PhD, RNC-OB, FAAN; Beckmann-Mendez, Diana; PhD, RN, FNP-BC; DiLeo, Holly; PhD, RN, FNP-BC; & Medina-Calvo, Maria; BSN, RN

How does your research or creative work reflect the mission and core values of the university?

This study reflects the university's mission through exploration of best practices within Nurse Managed Health Clinics to increase the opportunities for benchmarking within NMHCs in order to improve care to diverse patient populations. Advanced practice nurses trained in primary care are more likely than primary care physicians to practice in urban and rural areas and treat Medicaid recipients (Buerhaus, DesRoches, Dittus, & Donelan, 2015).

Purpose of the Study

Nurse-Managed Health Centers (also called Nurse-Managed Health Clinics) providing primary healthcare and preventive services are operated by Advanced Practice Registered Nurses (APRNs), primarily nurse practitioners and most often deliver services through an interdisciplinary team (AACN, 2016). Significant differences in demographic and practice characteristics exist between primary care APRNs and primary care physicians (Buerhaus et al., 2015). The identification of measures of excellence and benchmarking within primary care is sparse and even less for NMHCs.

This study is designed to:

1. Identify Nurse-Managed Health Centers in the United States.
2. Define the metrics used by these clinics to measure excellence in the areas of quality of patient care, clinical outcomes, patient satisfaction, community benefit, and financial sustainability.
3. Determine the methods by which these clinics obtain and aggregate the data for these measures.
4. Identify the benchmarks used to establish excellence.

Rationale and Significance

While quality dashboards are common throughout healthcare to provide focus on goals, there is no evidence in the literature that dashboards have been designed for NMHCs. Establishing drivers for excellence in a nurse led endeavor is critical to the growth of nursing and the primary care APRN.

NNCC (2011) has established Quality Standards that NMHCs should meet. These 46 standards focus on mission, nursing model, quality and safety, health services, access, sustainability, organizational leadership, outcomes, and physical environment (NNCC, 2011). A task force formed by the National Nursing Centers Consortium, the Institute for Nursing Centers, and the Nursing Centers Research Network developed a Quality Certification

Program for Nurse-Managed Health Centers based on the 46 NNCC Quality Standards (NNCC, 2011). The standards are broad and do not specify benchmarks by which to gauge achievements. Without metrics, methods, and benchmarks NMHC cannot monitor progress toward excellence on a timely basis.

Description of Methodology

This research project was a descriptive survey study of NMHCs and their use of metrics to measure excellence. The study surveyed a list of known NMHCs and used a snowball sampling method to obtain contact information for other NMHCs.

A survey developed by Drs. Dols, Weis, Beckmann-Mendez, and DiLeo was built in a common electronic survey tool, Qualtrics. Following IRB approval, the survey was deployed. Nurse leaders of NMHCs were surveyed electronically and replied to the survey at their own location on a computer, personal electronic device, or a wireless phone. The surveys were downloaded to Microsoft® Excel and then imported into IBM® SPSS® for analysis. Completion and return of the electronic survey indicated consent of the participants.

The total number of surveys obtained by 90-days post initial email was considered the total return for the study. Survey data was downloaded to Microsoft® Excel, prepared for import and then uploaded into IBM® SPSS®.

Findings and Conclusions

Forty surveys were completed. Of this sample, the majority of NMHCs were within University settings (72%). Thirty-five percent of the respondents indicated having independent, free-standing clinics, of which 12% were categorized as community health clinics. One of the community health clinics was mobile and another clinic identified as a "suitcase clinic" with providers working at multiple locations within homeless shelters. The physician role at the clinics was primarily collaborative (60%), medical director (25%), care provider (15%), provision of prescriptive authority (12.5%), policy authority (5%), and medical consultation (5%).

The top three NMHC goals were to increase the number of patients served, streams of funding, and services offered. Quality measures included improving outcomes for vaccinations, hypertension, diabetes mellitus, obesity, and depression screening. Patient satisfaction is currently being monitored at 72.5% of the clinics with the majority using a clinic-developed tool (60%). Additional insights and conclusions will be available by December 2017.

Registered Nurse Satisfaction and Intent to Stay at Current Hospital

Dols, Jean Dowling; PhD, RN, NEA-BC, FACHE; Katie Chargualaf; PhD, RN, CMSRN; & Kathryn Martinez; BSN, RN

How does your research or creative work reflect the mission and core values of the university?

This study reflects the university's mission through exploration of nurse job satisfaction and retention, both of which can affect community health and contributions to the greater good of our global community. Discovery of the factors which affect nurses' job satisfaction and intent to stay-on-the job provides the evidence for innovations to improve the work environment and nurse retention, supporting the ability of nurses to provide care for the most fragile members in our community.

Purpose of the Study

This study was designed to describe the nurse's career intentions, as well as the nursing leadership traits and nursing work environment factors that may impact nurse satisfaction with work and thereby influence nurse retention or turnover in nurses hired in the last five years. Stated more simply, the purpose of this research study was to identify the satisfaction level of the current registered nurses, their intent to stay, and factors that may influence their intent to stay.

Rationale and Significance

As stated by Kovner et al (2016), the turnover rate among nurses is alarmingly high. It is essential that we determine the current satisfaction of nurses and those organizational factors that may impact the RNs' satisfaction so that nursing leaders may better understand the elements that are contributing to turnover. The conceptual model discussed by Cho et al (2012) includes two major causes of turnover, hospital characteristics and job satisfaction that nurse leaders could address if the current workforce's satisfiers/dis-satisfiers were understood. This descriptive study will answer the research questions:

1. What is the current level of nurse satisfaction?
2. What is the RNs' intent to stay? and
3. What are the factors that may influence the RNs' intent to stay?

Description of Methodology

This study was a non-experimental descriptive study using a survey to collect data. An online survey was sent by email including a letter requesting the nurse's participation and providing a link to the survey. The

survey was built to seamlessly contain three instruments. The three instruments are the Career Survey for Nurses, the Director-Leader Traits Survey (Wieck, Dols, & Landrum, 2010), and the Nursing Work Index-Revised (Aiken, 2000).

The study focused on RNs in the highest turnover group to avoid dilution of findings by including nurses who are less likely to leave the hospital. Inclusion Criteria: All RNs hired in the last 6 years were sent a survey regardless of sex, age, ethnicity, race, experience, physical condition, work hours, work position, or work area or unit. Exclusion Criteria: No RNs hired at this hospital more than 6 years ago were sent a survey. No RNs not working at the hospital during the 8 weeks of data collection were included in the study as they were unable to access their work email while offsite. Data collection was completed in an 8 week time period from April to June, 2017.

Findings and Conclusions

95 RNs completed the survey. The respondents were primarily female and BSN prepared. Race/ethnicity of respondents was 46.3% Hispanic, 38.9% Caucasian, 7.4% African American, 6.3% Asian/Pacific Islanders, and 1.1% Native American. The sample represented 3 generations of nurses.

Respondents were employed an average of 1.72 years (SD 1.44) and worked in Behavioral Health/Psych (21.1%), ICU (18.9%), Medical Surgical Telemetry (18.9%), Perioperative (14.7%), Specialty Medical Surgical (10.5%), Emergency (9.5%), Rehabilitation (2.1%), and other (4.2%).

The majority of nurses (73.7%) were generally satisfied with their current position followed by nurses being highly satisfied (16.8%), generally dissatisfied (6.3%), and highly dissatisfied (6.3%). There was a significant generational difference in nurses' satisfaction based on the percentage of time they felt they were able to meet their patients' needs. Additional findings will be presented at the poster session. This study highlighted generational differences impacting job satisfaction which should be addressed to retain nurses.

Chronic Disease Burden and the Impact on Nursing Practice in South Texas

Dols, Jean Dowling; PhD, RN, NEA-BC, FACHE; Hoke, Mary; PhD, RN, RNBC, APHNBC, ANEF; Weis, Karen L.; PhD, RNC-OB, FAAN; & Gunter, M. Danielle; PhD, RN, CPN

How does your research or creative work reflect the mission and core values of the university?

The study aids in the identification of key areas where chronic diseases are directly impacting the health of our community. This leads to development of appropriate curricular foci, so that all our graduates are prepared to address the health needs and best serve the members of our local and global communities. Helping students understand their role in improving the health of the south Texas community is at the center of the University's mission of being concerned and enlightened citizens.

Purpose of the Study

The purpose of this study was to describe the disease burden across 40 South Texas counties and systematically assess health and chronic disease shifts for an 8 year period in order to provide information to update exemplars in a concept based nursing curriculum.

Rationale and Significance

Chronic diseases are the leading causes of death in the United States. Understanding the patterns of health and chronic disease burden by region is important in order to prepare nurses appropriately to address the regional issues of health and chronic illness. Understanding the disease burden by region is essential to develop appropriate nursing curricula with pertinent exemplars for this unique patient and nursing population. While the global burden of disease has been reported, the results primarily reflect 2010 data and do not provide a perspective of regional disease burden.

Description of Methodology

De-identified data from the Texas Healthcare Information Collection (THCIC) were used to

determine scope and change in chronic disease burden related to Diabetes Mellitus (DM) across 40 counties in South Texas from 1st Quarter 2008 to 1st Quarter 2015. The THCIC database, built with healthcare data from the hospitals and ambulatory surgical centers, collected by the THCIC, a department within the Department of Health & Human Services (DSHS), was created in 1995 by the Texas Legislature. Database variables used for analysis included the number of cases, total length of stay, and total charges for Diabetes Mellitus as a primary, secondary, tertiary, or quaternary diagnosis on admission within the 40 counties. Statistics on the number of nurses and nursing programs were derived from the Texas Board of Nursing and Texas Workforce Development. The number of hospitalized cases for Diabetes Mellitus tripled during the eight years from 2008 to 2015. The number of days individuals were hospitalized in 2015 was 4.2 times the hospitalization days in 2008.

Findings and Conclusions

The cost of the hospitalizations increased from \$9.3 million in 2008 to \$15.7 million in 2015, a rate increase of 1.7. The greatest increase was noted in 5 rural counties with small populations that experienced a double digit increase (11.1 - 62.0) in the number of cases. The 5 counties have lower than state average RN ratios with one county having no RNs. 4 of the 5 counties are adjacent to counties with a nursing program. Results demonstrate the usefulness of analyzing big datasets to examine the burden of chronic disease over time. The presence of DM as 2nd, 3rd, and 4th admission diagnoses in this study revealed a clear need to expand concept-based exemplars to encompass chronic diseases as underlying conditions associated with acute care hospitalizations. The lack of nurses and healthcare facilities in many counties complicates the delivery of timely, appropriate health care.

Implementation of Descriptive Writing in an Anatomy Course and Effect on Knowledge Acquisition and Retention

Esparza, Shandra D., EdD, ATC, LAT; Fisher, Reid A., EdD, ATC, LAT;
& Soles, E. Joanna, DHSc, ATC, LAT

How does your research or creative work reflect the mission and core values of the university?

This research project was conducted as a part of the University's Writing Academy. We sought to engage our students in creative and critical thinking as they used descriptive writing in their pursuit of knowledge. In our focus on educational excellence we aim to find innovative ways to assist all students with material retention. Practicing the skills needed for clear communication, both written and verbal, should be an essential component of any healthcare program.

Purpose of the Study

The purpose of this research was to determine if descriptive writing is a useful tool in improving knowledge acquisition and retention of human musculoskeletal anatomy.

Rationale and Significance

Human anatomy is a foundation for future coursework in the health sciences. The traditional approach for learning human anatomy and physiology knowledge in undergraduate education requires extensive memorization, which is not useful for retention and later recall of information. Writing can be used as one means to move beyond rote memorization to understanding the how and why of anatomy. However, little to no evidence is present in scientific literature regarding the utilization of writing as a modality for assisting students with learning human anatomy. Acquisition and subsequent recall of human anatomy is important in most allied health fields as many require board of certification examinations prior to entering practice, and anatomy is foundational for many of the questions on these exams.

Description of Methodology

Data was collected from a convenience sample of 41 athletic training and rehabilitative science students who were enrolled in the Spring 2017

ATHP 2305 Functional Anatomy course. Twice during the Spring semester, Functional Anatomy

students were tasked with using proper descriptive language to describe a musculoskeletal articulation (the knee and shoulder joints) utilizing a prompt that encouraged clear communication. Student examinations were evaluated to determine if students performed better on questions related to the content they had written about (knee and shoulder) compared to questions covering material taught traditionally (ie: ankle, foot, elbow, wrist). Data was compared using ANOVA to assess for significant differences between individual exam sections. Historical test scores were also used for comparison. Knowledge retention was also evaluated by repeating the comparisons after the comprehensive final examination.

Findings and Conclusions

Statistical analysis revealed descriptive writing had no significant effect on knowledge acquisition of musculoskeletal anatomy (based on section exams), nor a significant effect on knowledge retention (based on final exams). Additionally, while not significant, trends revealed writing might have hindered both knowledge acquisition and retention. In previous semesters, students performed better on knee and shoulder content. However, in the group that performed the writing assignments, knee and shoulder scores were on par with scores from the other areas. In conclusion, one in-depth writing assignment does not seem to be adequate for knowledge acquisition. Students may have compromised more effective study techniques in order to complete the assignment, or students may have developed false confidence in the material due to the time spent on the paper. Moving forward we intend to adjust the writing assignment(s) to include in-class prompts that require mental recall of information and build to larger descriptive papers.

How does your research or creative work reflect the mission and core values of the university?

In compliance with the mission of the University of the Incarnate Word, our program is an example of our call as community health educators to help educate vulnerable communities. As educators, we have a responsibility to serve our community and with this program, we will educate adolescents and help to facilitate life-long lessons to improve their quality of life.

Purpose of the Study

The purpose of this study is to evaluate a middle school 8th to 9th-grade health transition program. Health transition programs can be a critical tool to assist with this transition from middle to high school, thus increasing student's academic success. As educators, an athletic coach's opinion can influence the student's perception of health transition programs and can affect the student outcomes associated with the program.

The health transition program was developed to improve the transition from 8th-grade students to high school as well as improve their self-efficacy in decision making. The program topics include nutrition, physical fitness, bullying, communication skills, and preparedness for high school and college.

Rationale and Significance

Students who participated in transition programs have been shown to have lower dropout rates and better retention rates (Smith, J.B., 1997). Health transition programs add the health element to the transition program to educate the students about health issues related to the transition and create self-efficacy in health. Health transition programs can be a critical tool to assist with the transition from middle to high school, thus increasing student's academic success. A health transition program prepares students to transition from one school to the next while improving their self-efficacy and decision-making skills. As educators, an athletic coach's opinion can influence the student's perception of health transition programs and can affect the student outcomes associated with the program.

Description of Methodology

This study surveyed coach's perception of participating student outcomes within an 8th to 9th-grade health transition program. Coaches were asked to complete a twelve-question perception survey to help measure best practice for achieving program outcomes for participating

8th-grade students. The survey was administered through an online software application, Survey Monkey, and created by the authors of the research. The participating fifteen coaches are located throughout four South Texas middle Schools within a single independent school district. The questions in the survey provided background information on the coaches' experience and their perception of the health transition program in place at their schools. Participating coaches are 8th-grade male and female athletic coaches. The questions were analyzed with the use of Survey Monkey and the authors of the research.

Findings and Conclusions

Our findings in the survey suggest the coach's perception of the program is beneficial to the students and provided opinions on how to improve the program as well as limitations of the program. The sample was of fifteen middle school athletic coaches in South Central Texas. Most of the coaches have worked for five or more years. Six of the fifteen coaches have worked in a coordinated health program prior to the one that is currently being conducted. Eight coaches said that they did not offer a health class or program of any kind for their students. One coach out of the fifteen didn't think health classes were important to a student's future performance as an athlete. Question eleven asked the coaches for suggestions on topics for the health transition program but a few suggestions including STDs/HIV, mental health, and other topics related to sex education or abstinence are topics we are not approved to cover. While other answers that were given were either topic the program will cover in future lessons. Question twelve asked the coaches what suggestions they have for the program. Some of the suggestions included adding video technology or having smaller instruction groups. The coach's perception has provided important insight into their views on the program, topics, and its relationship with athletic performance. This information will be helpful for us to improve the program and understanding some of the limitations. The responses will be used to adjust lesson plans and activities helping to improve the quality of the lesson plans. The coaches see their students' everyday which gives them more insight as to what topics may help better with the student's transition. The results also provide understanding of limitations of the current program such as class size or the need for more time with the students to teach lessons.

How does your research or creative work reflect the mission and core values of the university?

The authors will help University of the Incarnate Word faculty, students and community better understand the impact that childhood obesity has on long-term health. The presentation will help the UIW community learn more about how obesity impacts the lifelong health of individuals and will discuss preventative measures that can be taken to help individuals develop and maintain a healthy body composition. The presenters hope to lend greater insight and understanding into the difficulties that obese individuals face in their everyday lives.

Purpose of the Study

The CDC (2017) estimates that almost 38% of Americans aged 20 and over are obese. The presentation will inform UIW students and faculty on how to define obesity, discuss factors contributing to the significant increase in obesity in the United States over the last 30 years and what measures can be taken to prevent obesity and improve overall long-term health of individuals in the UIW community.

Rationale and Significance

Rates of childhood obesity have more than tripled since the 1970's and 20% of children 6 -19 years old are obese. The older an obese child becomes the greater the likelihood they will become an obese adult. Obese children have significantly higher risks for cancer, cardiovascular disease, diabetes, gall bladder disease, hypertension, and renal disease as they become adults. The Bogalusa Heart Study published in 2007 found that 61% of obese children aged 5–10 years have one or more risk factors for heart disease and 27% have two or more. Children and parents need to be aware of the long-term health risks of obesity and what measures can be taken to help students develop and maintain healthy body compositions.

Description of Methodology

The presentation will present a review of the current academic literature related to childhood obesity and how obesity impacts the long-term health of children as they mature into adulthood.

Findings and Conclusions

Modifications in behavior, diet and physical activity can help students reduce rates of obesity and significantly improve their overall long-term health.

How does your research or creative work reflect the mission and core values of the university?

Our research reflects the core value of the university by using education. Our research will educate and test students' knowledge over STDs. The findings will help us better understand how to properly educate the students of UIW on the dangers of STDs. People have a right and a duty to participate in society, seeking together the common good and well-being of all, especially the poor and vulnerable.

Purpose of the Study

Based on Texas' abstinence grounded approach to sex education within independent school districts, it is hypothesized that first-time freshmen will have limited knowledge of STDs and preventative contraceptive measures. Therefore, the purpose of this study is to evaluate the current knowledge first-time freshman college students' have on sexually transmitted diseases (STDs) and preventative contraceptive behaviors related to the decreased risk of contracting an STD.

Rationale and Significance

The Center of Disease Control (CDC) has identified individuals between the ages of 15 to 24 as the highest population to be diagnosed with one or more STDs. College students, represent a steady rise of diagnoses across the United States (25%). Bexar County is the home to thirteen college campuses, which may contribute to Bexar County's high rate of STD cases. In 2015, there were more than 13,000 chlamydia and more than 3,900 gonorrhea cases in Bexar County. Currently, Bexar County represents a higher rate of chlamydia and gonorrhea than that of the national average. Studies suggest safe sex educational programs targeting young adults may significantly decrease the risks associated with contracting an STD. Unfortunately, in the state of Texas health education primarily focuses on abstinence and not a preventative

contraceptive. This approach to sex education could be contributing to the CDC's statistic reflecting STDs among young people.

Description of Methodology

Prior to any surveys being collected, this study obtained IRB approval from the UIW Office of Research and Graduate Studies. The study surveyed freshman students on the University of the Incarnate Word campus in San Antonio, Texas. The survey consisted of sixteen multiple choice questions focused on measuring student knowledge of STDs and risks associated with STDs. Students were provided computers and or tablets to complete the online Survey Monkey. Recruitment of student participants took place in the university student engagement center. Mean responses of each question were used to determine university freshmen's knowledge pertaining to STDs and risks associated.

Findings and Conclusions

This study collected a total of 38 responses, 35 self-identified as being college freshmen. Demographics include a high female (n= 73%; males n= 27%) minority (n= 81%; Caucasian n= 19%) population with ages ranging between 18 to 20. Of the survey responses, 30% of students stated they did not have sufficient information on STDs or the risks associated with STDs. Furthermore, 33% of students stated that sexual education within their high school settings were either insufficient or non-existent. This may explain why 38% of students responded with incorrect contraceptive forms for STD prevention. If a sex education workshop were offered, 35% of the respondents stated they would attend with an additional 41% not completely ruling it out. Although we hypothesized that most students lacked sufficient knowledge of STDs and STD prevention, these findings still suggest that further support is needed to increase freshmen college student knowledge on STD prevention.

How does your research or creative work reflect the mission and core values of the university?

This Sisters of Charity first mission work was to provide service to those individuals who were infirmed, most specifically those who were impacted by the cholera epidemic. To this end, the University of the Incarnate Word and the Sister of Charity's worldwide commitment to health care is evident in their programs and ministries, respectively.

This research addresses a public health crisis that supersedes short-term goals and short-term successes. It is our hope that this initiative will have a long-lasting impact on the lives of college students that transcends the now.

Purpose of the Study

To determine the impact of a required university wellness course on student intentions to engage in regular physical activity and incorporate healthier eating habits into their lives.

Rationale and Significance

Unhealthy eating and physical activity practices begin early in life and increase significantly as Americans age (CDC, 2011). Researchers reported significant weight gain occurs during the transition from high school to college (Harvey-Berino, Pope, Gold, Leonard, & Belliveau, 2012; Swanson, 2016). Only 15% - 30% of college students reported meeting minimal recommended amounts of physical activity (Blanchard et al., 2008) and the majority of the students ate fewer than five fruits and vegetables per day (American College Health Association, 2012; Huang et al., 2003). Healthy Campus 2020 provided health and wellness objectives and set a national agenda of health promotion and wellness that recognized the need for improving preventive efforts intended for promoting quality of life (American College Health Association, 2012). UIW's Dimensions of Wellness

course was developed to help students improve healthier behaviors like engaging in regular physical activity and eating healthier balanced meals.

Description of Methodology

A pre- and post-test design was used to test students' intentions to modify behaviors based on the Theory of Planned Behavior (TPB). Data were collected from 263 students (Freshman-142, Sophomores- 59, Juniors-36, and Seniors-26) who completed the Dimensions of Wellness class at UIW. Paired sample T-tests were used to determine significant differences between Pre/Post-questionnaire data. Comparisons were made between grade levels for students' intentions of engaging in regular physical activity and healthy eating habits. Significance was set at $p < .05$.

Findings and Conclusions

In comparing differences between grade levels, there was no significant change in freshman students' intention to engage in physical activity or healthy eating from pre- to post-course evaluation. Analysis of sophomores determined significant improvements in their intention to engage in regular physical activity and healthy eating. Juniors had only one significant area for their intention to engage in regular physical activity no intention of improving eating behaviors. There were no significant improvements on any of the intended behaviors among seniors in the wellness course. Based on the findings, the Wellness course does not increase the intention of freshman to make personal life-style modifications. However, sophomores may have been negatively impacted by poor life-style choices and are ready for positive life-style changes in both activity and nutrition. Juniors and seniors may have already made these modifications and have less intention of increasing or changing current behavior.

How does your research or creative work reflect the mission and core values of the university?

This study reflects the mission and core values of the University of the Incarnate Word by offering innovative suggestions for educational interventions aimed at improving interprofessional teamwork competencies among health care professionals. By improving health care professions students' ability to work effectively in teams, the patients they serve in the community will benefit from improved quality of care.

Purpose of the Study

The purpose of this study was to evaluate the effectiveness of an educational intervention aimed at improving subjects' interprofessional teamwork competencies. The educational intervention was used to compare a treatment group that combined nursing, physical therapy, and pharmacy students, and a control group of nursing students only.

The following research questions were addressed:

Research Question 1: Are there significant differences between the treatment and control groups for pre and posttest scores of interprofessional teamwork competencies?

Research Question 2: Are there significant differences between nursing students in the treatment and control groups for pre and posttest scores of interprofessional teamwork competencies?

Research Question 3: Are there significant within-group differences for pre and posttest scores of interprofessional competencies?

Research Question 4: Do self-reported teamwork competencies vary between nursing and other health professions within the treatment group?

Research Question 5: What are the subjects' views regarding the value of the educational intervention?

Rationale and Significance

Interprofessional education (IPE) is recognized widely as an essential component to improving patient outcomes but little progress has been made toward understanding the impact of specific educational interventions on interprofessional competencies. To guide healthcare educators in the implementation of effective IPE strategies, additional research using rigorous methodology is necessary.

The findings of this study contribute to the body of knowledge regarding the evaluation of educational methods aimed at improving interprofessional competencies. The

study fills a gap in the current knowledge base by incorporating recommendations for IPE research including: 1) a controlled design; 2) a comparison of an interprofessional approach to an intraprofessional approach to an educational intervention; and 3) measurement of the impact on team skills using a validated instrument.

Description of Methodology

A quasi-experimental, pre and posttest design was used to test an intervention for improving the interprofessional teamwork competencies of baccalaureate nursing, doctoral physical therapy, and doctoral pharmacy students. The educational intervention used an interprofessional simulation-based exercise involving a treatment group that included a combination of nursing (n = 16), physical therapy (n = 6), and pharmacy students (n = 3), and a virtual intraprofessional simulation-based exercise involving a control group that included only nursing students (n = 17). The Team Skills Scale was used before and after the intervention to quantitatively measure the effectiveness of the educational intervention used in the treatment and control group. Open-ended questions were used following the intervention to elicit subjects' views regarding the impact of the activity.

Mann-Whitney U test, independent-samples t-test, and Wilcoxon Signed Rank Test were used to analyze pre to posttest differences within and across groups. Thematic content analysis was used to categorize responses to open-ended questions.

Findings and Conclusions

Findings of the study indicate that both approaches were effective in improving interprofessional teamwork competencies. Statistically significant increases in Team Skills Scale posttest scores were noted for both the treatment and control groups. However, posttest scores were significantly higher in the treatment group than the control group, indicating that the face-to-face interaction that took place between students of different professions had a greater impact on achieving interprofessional teamwork competencies. Themes that emerged from the open-ended questions support the quantitative findings of the study, indicating that the exercise was beneficial in improving teamwork competencies.

The findings of this study suggest that more than one approach to an educational intervention can be effective in improving interprofessional teamwork competencies. Future research should continue to explore the effectiveness of different educational approaches and include longitudinal studies to assess effects over time.

Maternal Prenatal Anxiety and Active Duty Status Predict Low Birthweight and Preterm Birth in a Military Sample

Karen L. Weis, PhD, RNC-OB, FAAN; Katherine C. Walker, MSN, RN; & Wenyaw Chan, PhD,

How does your research or creative work reflect the mission and core values of the university?

The results represent over 15 years of work leading to the development of an intervention aimed at decreasing the incidence of low birthweight and preterm birth and improving maternal and infant health.

Purpose of the Study

Test the relationship of prenatal maternal anxiety and depression to infant birthweight and gestational age at birth in a military sample.

Rationale and Significance

Accumulating evidence indicates pregnancy-specific anxiety may be a key risk factor for preterm birth (PTB) and low birthweight (LBW). Rather than generalized anxiety, pregnancy-specific anxiety allows for focused prenatal assessment and the development of interventions to reduce PTB and LBW, while increasing infant in utero health.

Description of Methodology

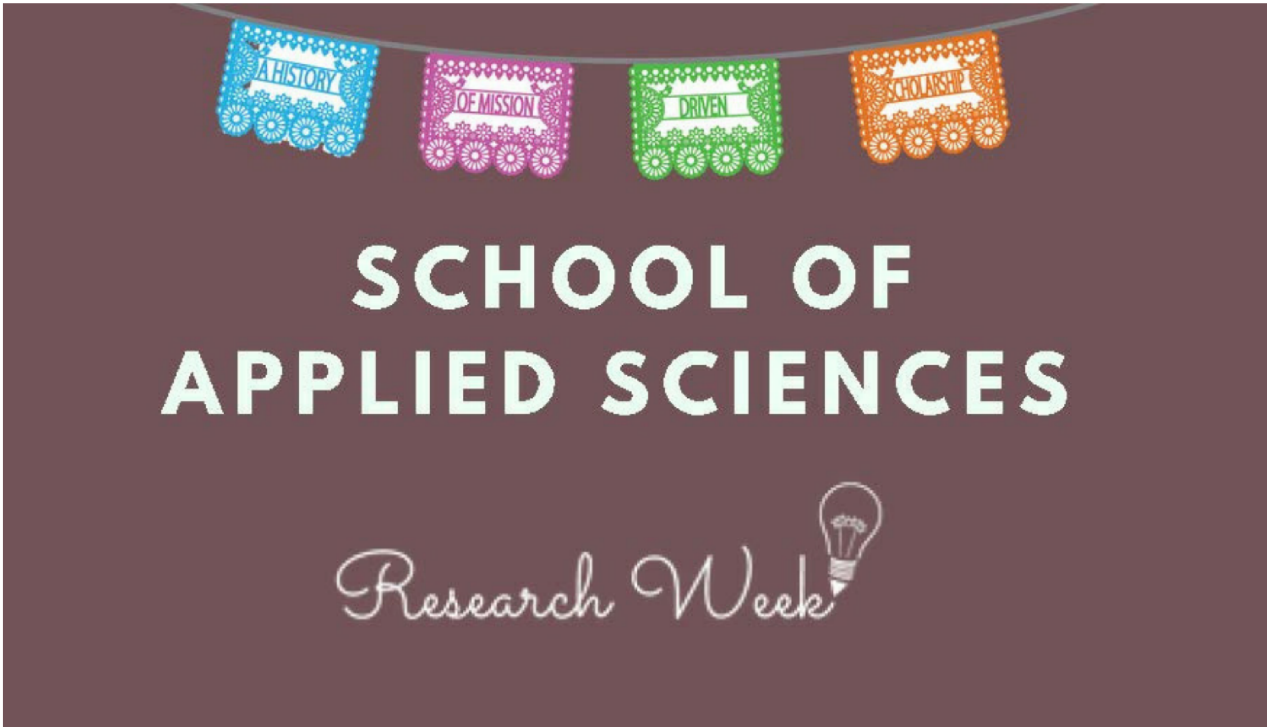
246 military women (pregnant active duty and wives of active duty) were recruited, consented and randomized to the study intervention (M-O-M-STM) or routine prenatal care and completed psychosocial measures in each trimester of pregnancy. Birth outcomes data were obtained from the delivery and infant birth records.

Individual slopes for each of the measures of anxiety and depression were calculated by the Best Linear Unbiased Predictor (BLUP), generated by mixed effect models with a random slope. Logistic regression models were applied to find the relationship between the slope of each prenatal anxiety and depression and low birthweight and preterm birth.

Findings and Conclusions

For each 1/10 unit increment of the slope for anxiety related to Concerns for Well-Being of Self and Baby in Labor, the odds ratio (OR) for low birth weight was increased by 83% ($p=0.03$, CI for OR: 1.08-3.09). Active duty women were significantly more likely to have LBW infants than the military wives. For each 1/10 unit increment of slope in prenatal anxiety (Acceptance of Pregnancy, Preparation for Labor, and Fear of Pain, Helplessness and Loss of Control in Labor), the OR for preterm birth was increased by 37% ($p=0.01$, CI for OR: 1.09-1.73), by 60% ($p=0.002$, CI for OR: 1.18-2.16), and 54% ($p=0.015$, CI for OR: 1.09-2.18) respectively.

The results provide evidence for pregnancy-specific anxiety predicting birth outcomes. The M-O-M-S program effectively reduced anxiety found to increase LBW/PTB. Further research is needed to assess the direct effect of the M-O-M-S on birth outcomes.



The School of Applied Sciences focuses on providing educational excellence to diverse populations through programs that foster the development of every stakeholder to achieve their goals.



How does your research or creative work reflect the mission and core values of the university?

The research focuses on and addresses the challenges veterans face in developing their post-military self-identity. Given UIW's commitment to the military and veterans along with our mission of service, this research reflects UIW's ideals by exploring the transition challenges of veterans, to include students who attend our university. The research reveals the difficulties veterans encounter and offers recommendations to help veterans adapt as students, employees, and civilians in post-military environments.

Purpose of the Study

The purpose of the qualitative study was to examine how veterans change and adapt their post-military persona into an emerging civilian identity functioning in organizations that are potentially dissimilar to military culture. The study presumed that veterans would easily transition into a workplace similar to military culture, such as working for a defense contractor. However, working in a non-defense industry would create challenges as the veteran tries to engage in multiple adaptations such as a new work environmental culture, being a civilian, and establishing a post-military identity.

Rationale and Significance

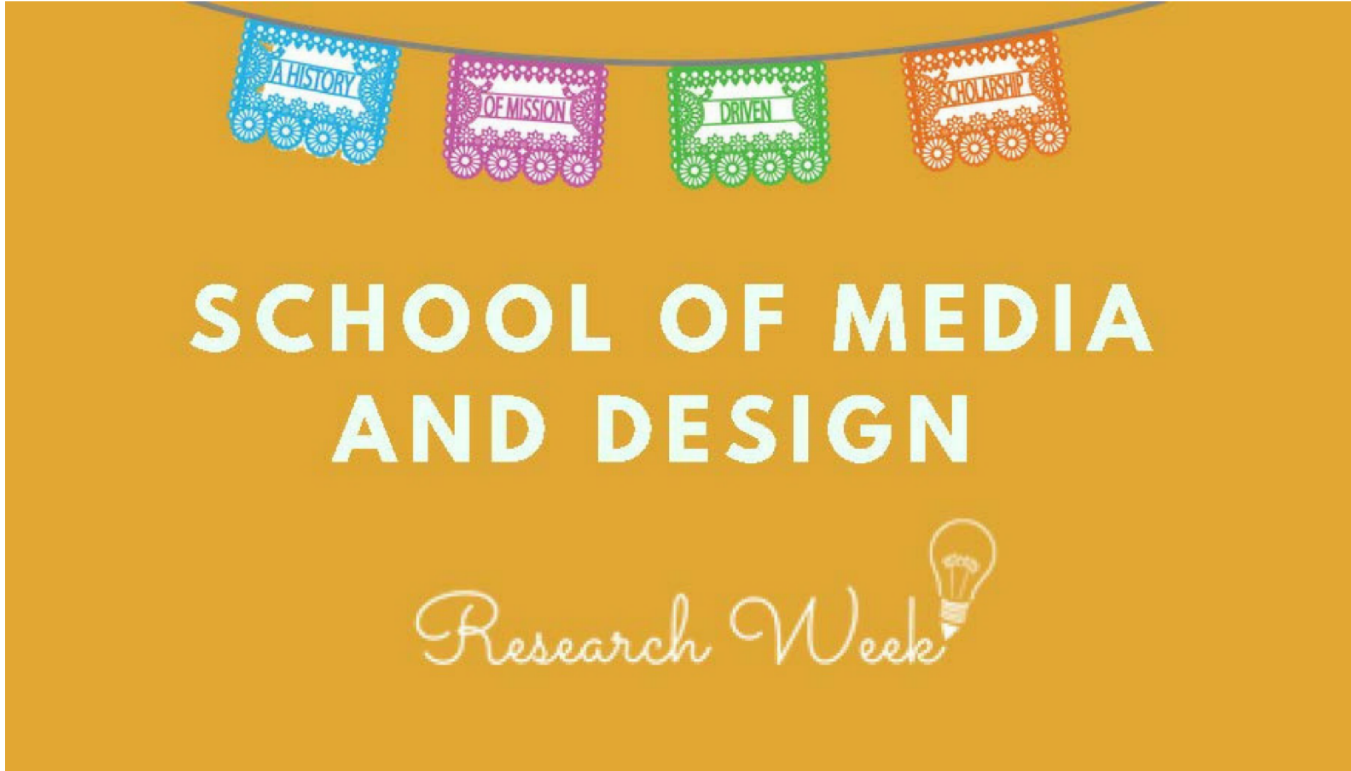
Military members leaving the service must adapt not only to a new profession and work environment but also to the civilian world. The study is significant because military members may have difficulty finding employment comparable in status to their military rank and responsibilities while also facing cultural challenges moving from military to civilian life. The results can be used by Industrial/Organizational psychologists to develop practical programs for employers to successfully integrate veterans into the workplace.

Description of Methodology

Using grounded theory, twelve veterans were interviewed. Semi-structured interviews were used based on a constructivist approach consisting of ten questions focusing on veterans military and post-military employment and identity experiences. Data were analyzed using memo-writing and coding after transcribing all interviews. The Atlas.ti software was used to manage and compare the data. This process enabled the recognition of several emerging themes within the data.

Findings and Conclusions

The study revealed the following themes: a need for purpose continues; the military experience changes its members, regardless of whether the individual had a strong or weak identification with the military; the transition out of the military was difficult; and the civilian work environment is different and harsher. Based on these themes, the Veterans' Self-Identity Development (VSID) Theory was formulated. This theory considers three stages of veterans' identity development: the military identity, the transition identity, and identity re-formulation. The findings supported literature on work and identity, but, added to the understanding of how veterans adapt their personal and professional identities post-military service. Recommendations were developed for continued onboarding programs specific to veterans, mentoring of newly hired veterans by senior veterans within workplaces, and linking veterans' professional duties with a purpose within the organization.



The School of Media and Design (SMD) serves the needs of students by providing a firm foundation in theory and application utilizing innovative, state-of-the-art software and computer technology. In harmony with UIW's Mission, SMD seeks not only to develop the necessary knowledge and skills to become effective professionals in students' selected careers, but to help cultivate them in becoming concerned and enlightened citizens, rooted in the core values of education, truth, faith, service and innovation.



Spirituality in a faith-based institution: faculty experiences of facilitating the spiritual development of students

Carbajal, Darlene PhD

How does your research or creative work reflect the mission and core values of the university?

The Mission of the University of the Incarnate Word strives to develop students' cognitive capacities and attend to students' holistic development. This study contributes to the Mission by presenting research from faculty who recognize the discipline and classroom environment as an opportunity to promote self-questioning, acknowledge big questions, and support discussion of meaning-making. As demonstrated in the findings of this study, spirituality is carried out by faculty who are willing and bold enough to move beyond disciplinary frameworks of objective knowing—to encourage students to create new meaning from the context of the learning and to see the importance of connectedness. Regardless of the institution, there will be those who are unable to make connections as to what is meant by spirituality and its relationship to higher education and holistic development. The hope of this study is that the findings of this research will provide members of higher education with new perspectives to promote student development academically and spiritually. Thus, this study contributes to the Mission of the University by presenting educational practices that promote self-awareness and awareness of others.

Purpose of the Study

The purpose of this study is to examine faculty members' attitudes about the role of spirituality in higher education and the pedagogical and mentoring approaches that faculty members in a faith-based institution use to facilitate the spiritual development of students.

Rationale and Significance

Past research indicates there is value in discussing spirituality in the classroom. The primary reason for conducting this research was to explore this further. This study is primarily intended for faculty who wish to integrate pedagogical and mentoring approaches that serve to facilitate students' spiritual development. Research presented in this study is from an educational perspective. The findings may increase understanding of spirituality and holistic education, specifically from faculty outside the department of religious studies. This study contributes to existing literature by presenting research where spirituality is described from faculty across disciplines at a faith-based institution. The suggestions can be especially important for those who wish to implement spirituality, separate from

religion. Additionally, this study contributes to the gap in literature reviewed where there is more focus towards spirituality and the need to reform public education. The findings may have implications for understanding how faculty at faith-based institutions understand spirituality.

Description of Methodology

Participants, selected using purposeful sampling, were 8 faculty from a faith-based institution in the southwestern region of the United States who reflected a variety of teaching disciplines in the humanities, arts, social sciences, education, mathematics, natural sciences, and health professions. Participants shared the same characteristic of teaching undergraduate students at the same university and were recipients of a specific faculty award. The decision to focus on faculty perceptions was based on existing literature that describes the critical role that college faculty play in strengthening and promoting students' spiritual development (Astin et al., 2011; Palmer, 1998; Parks, 2011). An interpretive phenomenological analysis (IPA) approach was used as the research design for this study. Semi-structured private interviews were the primary sources of data collection.

Findings and Conclusions

Participants described spirituality as foundational to student wholeness, as an opportunity to increase self-awareness and to have respect, empathy, and compassion for others. Findings of this study identify how spirituality naturally works its way into the higher education environment, including both the university's involvement to facilitate spiritual development, and faculty involvement to support spiritual development through pedagogical approaches and the teacher-student relationship. This study also makes the connection between faculty members' personal definitions of spirituality and how students are seen and treated. Connectedness was a central finding of this study. The first conclusion of this study relates to Institutional Fit, what faculty and the university have in common allows for the capacity of connectedness to emerge. The second conclusion of this study relates to the passion and commitment of the teacher to help students in their inner-development that makes a difference in the way that faculty move beyond disciplinary frameworks.

How does your research or creative work reflect the mission and core values of the university?

The Internet is a modern technological marvel that has become deeply woven and integrated into almost every aspect of our society. As the key means for the free and open communication and exchange of ideas around the world, Internet users need to feel safe and free from threats that would restrict or limit their ability to communicate truth, share in multidisciplinary innovation, coordinate community service, and explore, expound, and defend causes for social justice. Research and development of an advanced personal and network security protection system is needed to battle the ever evolving threats on the Internet.

Purpose of the Study

This cybersecurity research and development project relates generally to a set of methods and devices commonly referred to as network intrusion detection or prevention systems, and deep network packet inspection systems. The system under development explores advances in network system security by integrating an intermediary network device for mitigation of malicious software directed against software based network connected systems. In particular the security protection system investigates methods in which stateful data streams are intercepted, algorithmically analyzed, selectively modified, and reinserted in the stateful data stream in near real-time during information transfer between one or more processing systems over a computer network. Aspects of this invention are also related to the tradecrafts of digital data hiding and covert channel obfuscation, which embodies digital tagging and watermarking. The main objective of this applied research is to advance the field of network defense methodologies in cyber security including malware mitigation within networks.

Rationale and Significance

The Internet was designed as a means to exchange and expand technical and community knowledge using free and open information protocols transmitted over a multitude of expanding communications paths. The underlying communications expanded rapidly over the last several decades, connecting military, academic, and industrial communities around the world. Rapid application development spurred by enhanced commercialization and marketing opportunities resulted in highly complex and evolved industrial communications market places that are now a well-established and essential worldwide interconnected community of both commerce and communications. Resulting capabilities and opportunities for prosperity brought on by this human communications marvel has also resulted in the ever escalating attraction of malevolent actors, relentlessly intent on

exploiting the fundamental open-style architecture of the Internet. Advanced active network defense methodologies are needed to combat the ever increasing threats on the Internet in order to ensure the free, open and safe exchange of information is maintained.

Description of Methodology

An active network security system is used to identify patterns within stateful network transactions to modify selected data elements within stateful data flows to effect desired algorithmic results as the messages flow through this system from between other information processing resources. The system resides between the information source system (servers), which provides the application data, and one or more destination systems (clients) which is a software system, appliance, or another application. The system is a network security-centric appliance suitable for use in TCP/IP networks. It is a unidirectional connected network appliance capable of communications network data stream interception, stream extraction and insertion, message handling, message pattern detection algorithms, and event based stream data modification functionality. The system captures, processes, and forwards all network messages that are either transmitted or received through its multiple unidirectional interfaces. The system simultaneously identifies and processes multiple individualized client-to-server and server-to-client message flows and performs low level data analysis on each individual data segment within these discrete application data streams. Using a prescribed set of rules the system algorithmically resolves a predefined series of potential actions to be applied toward a particular data segment within the stream which is being transferred through the system.

Findings and Conclusions

One of many currently demonstrable functions of the system includes the means and methods to implement computer system exploitation mitigation processes against zero-day malicious software directed against software based network connected systems. Given the system resides between the application processing nodes, as defined by the client-server paradigm, one implementation of the preferred embodiment facilitates digital data hiding and covert channel obfuscation operations on digital multimedia files being transferred through the system. In a direct follow-on relation to this digital embedding capability, the system also has functionality to embed session-unique digital tags within the real-time data flows of multimedia files. The resultant data artifacts from this tagging function may be used to subsequently enforce privacy policies, intellectual property management, copyright protection, as well as digital content delivery management

How does your research or creative work reflect the mission and core values of the university?

Our creative work reflects the mission and core values of the university by educating our peers about a topic that is not normally talked about. We provide information to help students make smarter decisions--from debunking common misconceptions to providing information for local clinics.

Purpose of the Study

"Protect Yourself" was a group project for our Graphic Design III course. The project was to develop an awareness event at a college campus that included a signage system of at least 5 signs to guide visitors. We chose a subject we felt was important to young adults, which was sexually transmitted diseases (STDs). The project included a "call-to-action" activity that students can participate in.

Rationale and Significance

The goal for this campaign was created to help educate the student body about the seriousness of STDs and clear up some of the common misconceptions. We include facts, statistics and possible places around the city where students can get tested. We hope that by spreading the word about a topic that isn't normally talked about, we can change at least one person's life and start important conversations.

Description of Methodology

At the start of the project, we were introduced to campaigns and wayfinding. We started with research on our topic--STDs. We also looked for inspiration in similar projects and ideas as well as inspiration in posters, illustrations, paintings, etc. We created a concept, defined what our campaign would consist of, and started sketches on our logo and elements to bring into our campaign. We bring our sketches into Illustrator, make them digital and fix them up. At the same time, we have one person starting on sketches for our posters and another working on an infographic. We go through several rounds of sketches, refinements, and critiques until we have the final products. Lastly, we photograph our work to show what our campaign would look like in real life and create a case study booklet that showcases the project.

Findings and Conclusions

This project was an introduction to wayfinding and identity systems in our Graphic Design III course. We learned to apply our designs to a medium that wasn't flat. We had to take into consideration the sizes of our designs and compare them to human scale. We also learned how to keep a system consistent through our use of color, typography, and imagery without it looking too repetitive.

How does your research or creative work reflect the mission and core values of the university?

Socially conscious design, or socially responsible design, is design that reflects the responsibilities that designers and people have in and for society. My project is a campaign that raises awareness about refugees and falls under the category of socially conscious design. This reflects the mission and core values of the university by bringing light to a topic that isn't talked about on mainstream media. By educating ourselves and others about refugees, the better we can do to help them.

Purpose of the Study

The Syrian Refugee Crisis Campaign is a creative project for my Honors Thesis. It is an awareness campaign about Syrian refugees which includes a poster series, a zine, an infographic and a case study. The design of the campaign needs to be cohesive yet be able to stand alone. The visual language, such as typography, color and imagery, must create an engaging and effective piece that raises awareness on the issue.

Rationale and Significance

I chose this topic because it resonated with my personal life. My parents fled from a war-torn country and came to the United States in search of a better life. The Syrian refugees are doing the exact same thing years later.

As a graphic designer, I can use my skills to evoke emotion and bring awareness and attention to this topic. I'm using what I know and what I have learned to make a difference. Especially since this topic is personal to me, I have a passion to make it happen.

My campaign focuses on the children that are affected by the war but will also include general information about the war itself and refugees as a whole.

Description of Methodology

I started off my project doing a lot of research so I can get a better understanding of my subject, which includes the Syrian civil war and Syrian refugees. Along with topical research, I also did design research where I looked at existing campaigns and other miscellaneous design for inspiration. From there, I determine which collaterals that will be included in my project. For this awareness campaign, I have a poster series, a zine and an infographic. Afterwards, I do conceptual sketches which turn into digital compositions. Those went through several rounds of refinements and critiques before I reached my final designs. Lastly, I photographed/mockup my collateral to show how they will look like in real life usage.

Findings and Conclusions

In Graphic Design II, we went over design for social awareness and did a project over the Universal Declaration of Human Rights. However, that was two years ago. Now as a senior, I've grown as a designer and have a better understanding of using design for the greater good.

This project allowed me to really think about how my work will affect others and how to channel that power into creating something effective. It also allowed me to consider where my work will be shown, who is my target audience and what will work best in a specific environment. In class, most of our work is done without an audience in mind.



SCHOOL OF OSTEOPATHIC MEDICINE

Research Week 

The School of Osteopathic Medicine is dedicated to providing our learners with the knowledge, skills and attitudes which will empower them to develop into highly competent and compassionate osteopathic physician leaders who are committed to community engagement and social accountability. We are committed to the success of our students through transformational learner-centered education, professional identity formation, and holistic student support.

Research Week 

The Cost of Diabetes

Schlenker Thomas, MD, MPH; & Mangla Anil, PhD, MPH

How does your research or creative work reflect the mission and core values of the university?

The “Cost of Diabetes” quantifies what may be the greatest public health problem of San Antonio and South Texas as measured not only by money but also by human suffering, years of productive life lost and premature death. Further, it suggests strategy to improve population health through community engagement by well trained, compassionate, health professionals committed to social justice and health equity.

Purpose of the Study:

Culminating several years of research into the prevalence of Type II Diabetes in San Antonio/Bexar County and the disproportionate impact it has on Hispanics, Drs. Schlenker, Mangla and co-authors calculated community-wide costs of the disease and potential savings of prevention.

Rationale and Significance:

It is estimated that 18% of Bexar County adults have diabetes, while 33% are pre-diabetic. Diabetes leads directly to end-stage renal disease, lower-extremity amputation, blindness, myocardial infarction and stroke which diminish or eliminate individuals' opportunity for gainful employment and puts them at greatly increased risk for premature death. Diabetes is more prevalent among Hispanics and Hispanics with diabetes are more likely to suffer serious complications.

Description of Methodology:

Prevalence of diabetes in Bexar County is based on the biannual US Behavioral Risk Factor Statistical Study (BRFSS). Diabetic hospitalization and complication rates by race/ethnicity are based on Texas DHSS Hospital Discharge Summaries. A1C linked diabetic complication rates and medical care costs to treat complications are derived from published literature. A systems-science, agent-based, simulation model of diabetes progression developed by Yan Li, Padron and Pagan of The New York Academy of Medicine Center for Health Innovation is used to project health and cost outcomes.

Findings and Conclusions:

Hispanics adults in Bexar County are twice as likely as whites to suffer from diabetes and much more at risk for diabetic complications. Of the 1,944 diabetic amputations that occurred in a recent year, 67% were performed on Hispanics at a rate 1 1/2 times that for white diabetics. A 20 year projection based on the simulation model, demonstrates that lowering the average hemoglobin A1C level of Bexar County diabetics and pre-diabetics by 1%, would prevent thousands of disfiguring and debilitating complications, save many lives and avoid over \$400 million in medical expenditures.



SCHOOL OF PROFESSIONAL STUDIES

Research Week 

The School of Professional Studies focuses on providing educational excellence to diverse populations through programs that foster the development of every stakeholder to achieve their goals.

Research Week 

How does your research or creative work reflect the mission and core values of the university?

This case study reflects the mission and values of the University as it investigates, details, and validates Disney's use of innovative technologies that academics and practitioners might leverage as best practices in a variety of industries and applications.

Purpose of the Study

The purpose of this case study is to detail how the Walt Disney Company has consistently and creatively leveraged innovative technologies to continually improve their amusement parks' business operations and customer service. This case reviews the historical timeline of industrial advancements implemented by Disney in their amusement parks and it examines the corporation's financial and operational benefits received from these advancements, demonstrating that technology is necessary to improve business productivity and efficiency.

Rationale and Significance:

This case study provides an opportunity for a Doctor of Business Administration student to further develop a first-semester assignment as she refines her research and presentation skills. In addition, the case will provide an additional contribution to the scholar-practitioner literature in the areas of technology, innovation, and business operations.

Description of Methodology

As a case study, the authors conducted a business literature review and developed a best-practice case presentation following the Harvard Business School Handbook. The media and conglomerate realized revenues in excess of \$55 billion in 2016 and is studied from a number of perspectives in both under- and graduate level business courses. In this descriptive case study, the authors analyze the amusement park segment as they examine the impact of the RFID Magic Bands utilized in Disney World Parks.

Findings and Conclusions

TBD

How does your research or creative work reflect the mission and core values of the university?

This case study will reflect three specific UIW core values that drive all aspects of our University as it develops people in their daily lives. Specifically, this case will contemplate and propose transferable best-practices employed at CPS Energy related to truth, service, and innovation. By considering the unique structure and framework of CPS Energy as a municipally owned energy company, alongside the intriguing free market and monopolistic influences, we quantify and qualify in detail the contributions made to the community of San Antonio by CPS Energy. The findings suggest that to build a stronger community we must be innovative in our approaches so we can serve multiple constituents with a variety of interests.

Purpose of the Study

The purpose of this case study is to examine the total value proposition provided by CPS Energy. Specifically, we consider the Noble Prize-winning scholar Milton Friedman's view on the power of free markets, that they are always the best solution. "The only way that has ever been discovered to have a lot of people cooperate together voluntarily is through the free market." Do open and free markets always provide the best universal good?

Rationale and Significance

This case study provides an opportunity for a Doctor of Business Administration student to further develop a second-semester assignment as he refines his research and presentation skills. In addition, the case will provide an additional contribution to the scholar-practitioner literature in the areas of free-market economics, monopolies, and government-owned energy companies.

Description of Methodology

As a case study, the authors conducted a business literature review and developed a best-practice case presentation following the Harvard Business School Handbook. San Antonio's own CPS Energy, the largest municipally owned energy utility in the Nation, is the focus of this descriptive case study. We examine total, net value proposition for a typical utility customer who is served by a monopolistic utility provider to determine if choice is always, sometimes, or never more desirable.

Findings and Conclusions

By utilizing CPS's annual report to calculate the total value equation and comparing it to Houston and Dallas, this case suggests that San Antonio customers receive nearly 1.5 times the value of comparative free-market cities. A majority of the additional value for the average Alamo City customer comes from the annual city payment, which is the City's single largest source of revenue, off-setting the tax burden of the citizens. Customers of CPS Energy receive additional value from the reinvestment in community that CPS Energy makes through volunteer hours, the United Way, REAP, and the EPRI Center. CPS Energy is able to provide all these additional value elements, while having the second lowest average rate of the ten largest cities in America. These findings suggest that while markets can produce lower sticker prices, regulated institutions like CPS Energy can provide greater total value through a reinvestment into the community.

How does your research or creative work reflect the mission and core values of the university?

Two specific values of the university will be examined in this case study. One, the innovation of Tesla, Inc., not just as an automaker, but as a technology and software company will be highlighted. And two, from an educational perspective, we anticipate that we will discover several best-practices that might be applied in other industries and in other organizations.

Purpose of the Study

This case study examines Tesla, Inc., the American technology, automaker, and energy storage company headquartered in Palo Alto, California. With annual revenues in excess of \$7 billion, Tesla is one of the fastest growing electrical-vehicle companies in the world. Tesla's reasonably priced, zero-emission vehicles with eco-friendly designs are disrupting the traditional fossil-fuel automotive industry. The company's approach incorporates excellent customer service, great products and services, R&D, a talented workforce, and an efficient distribution system. Tesla is not just an automaker, but also a technology and software company with a focus on energy innovation. It has leveraged its electrical battery storage expertise to move into residential and commercial energy storage systems. The purpose of this case study was to review Tesla's unique business strategy.

Rationale and Significance

This case study provides an opportunity for a Doctor of Business Administration student to further develop a first-semester assignment as he develops his research and presentation skills. In addition, the case will provide an additional contribution to the scholar-practitioner literature in the areas of technology, innovation, strategy, and research and development.

Description of Methodology

As a case study, the authors conducted a business literature review and developed a best-practice case presentation following the Harvard Business School Handbook.

Findings and Conclusions

Six key findings regarding Tesla's operations are highlighted in the case: 1. Financial (battery electric vehicle pricing), 2. Infrastructure (scarce charging stations), 3. Marketing (mix and similarities to Apple Inc.), 4. Production (expedited expansion of Gigafactory), 5. Customer Service (maintenance), and 6. Human Capital (talent recruitment and retention).



The School of Physical Therapy educates physical therapists who, through skilled, reflective, holistic patient-centered practice, and scholarly activities, optimize movement and wellness for the common good of society.



The impact of an introductory anatomy workshop on introducing team based learning strategies and decreasing cognitive load in a problem-based learning, Doctor of Physical Therapy program.

Cansino L, Cone, T, Cumbest, E, Senne M, Sowell K, Thomas E, Kaliski D, Bains M

How does your research or creative work reflect the mission and core values of the university?

Faculty and students supported each other in the creation of an anatomy workshop whose purpose was to introduce team based learning strategies and reduce some of the initial cognitive load experienced by many first year students. The results of this study will guide the structure and delivery of future anatomy workshops demonstrating our commitment to educational excellence.

Purpose of the Study

To investigate the effectiveness of a peer lead introductory anatomy workshop in introducing team based learning strategies and decreasing cognitive load by becoming comfortable navigating a new learning management system and becoming familiar with the most commonly utilized anatomy resources available at the school of physical therapy

Rationale and Significance

The University of the Incarnate Word, School of Physical Therapy (SoPT), is a problem-based learning (PBL), Doctor of Physical Therapy program modeled after the original McMaster University PBL paradigm. Prior studies have shown that teaching and learning through team based learning is effective. However, the novelty of PBL presents many challenges such as navigating group dynamics and knowing how to utilize different learning strategies and techniques that foster an environment that is conducive to team learning. In addition, these challenges are confounded by having to learn to navigate through multiple interactive anatomy resources, multiple required anatomy texts in addition to a learning management system such as Blackboard in which these resources can be found. Therefore, the need for providing an experience that addresses some of the logistical challenges observed in a graduate PBL program, thereby reducing cognitive load, is warranted.

Description of Methodology

A 2-day anatomy workshop was developed by second year physical therapy students with the guidance of foundational science instructors. The workshop included online preparatory modules and on-site instructional activities. Online modules utilized the learning management system (BlackBoard) and were formatted to follow the Quality Matters Standards. On-site instructional activities included the utilization of learning strategies that second year students had found most helpful in their first year of anatomy studies. Different learning strategies included the use of interactive anatomy software, anatomy recall and draw, guided anatomy identification activities using Von Hagens plastinated models, and student presentations. Participants included 20 students from the class of 2020 cohort.

Post-semester surveys will be collected and analyzed by the end of January. Surveys will query participants on their use of the learning strategies, use of anatomy resources, and experience navigating a new learning management system.

Findings and Conclusions

In addition to creating an experience that encourages group participation and mimics the type of learning environment the students will encounter in foundational science class, the inclusion of an anatomy workshop prior to program initiation may decrease the logistical cognitive load that is initially placed on an incoming student in a PBL-DPT program. Participation will provide the students with a set of useful tools they can utilize in their anatomy studies and share with their peers, fostering an environment of collaboration and group learning. In addition, the results of this study will help identify the strategies the participants found most helpful in navigating their anatomy studies to improve the structure and delivery of future anatomy workshops. (conclusions will be updated based on pending data analyses).

The impact of an introductory anatomy workshop on anatomy competency and performance in a problem-based learning, Doctor of Physical Therapy program

Cansino, E; Cone, T; Cumbest, E; Senne, M; Sowells, K; Thomas, E; Kaliski, D; Bains, M

How does your research or creative work reflect the mission and core values of the university?

This project falls under the scholarship of teaching and learning and specifically investigates teaching methods using a problem based learning and student-centered pedagogical approach. Thus, this research is reflective of UIWs core values of educational excellence and promoting life-long learning.

Purpose of the Study

To investigate the effectiveness of an introductory anatomy workshop to improve student perceptions on anatomy confidence and preparedness, and anatomy competency measured by practical exam scores during the first year of a Doctor of Physical Therapy program.

Rationale and Significance

The University of the Incarnate Word, School of Physical Therapy (SoPT), is a problem-based learning (PBL), Doctor of Physical Therapy program modeled after the original McMaster University PBL paradigm, which is rooted in self-directed learning in which small group tutorials and cases forms the basis of the curriculum. Replacing the traditional lecture based program creates a challenge for the faculty to facilitate gross anatomy learning using the PBL model. In addition, the novelty of PBL to incoming students presents additional challenges including resource overabundance, content relevance, time management and group dynamics. Thus, the impact of an anatomy transition workshop for improving student self-efficacy and anatomy competency in a PBL-DPT program is warranted.

Description of Methodology

The SoPT, class of 2020 cohort was offered the opportunity to participate in a 2-day anatomy workshop prior to starting the program. The first 20 students who responded to an email participated in the workshop. The remaining students cohort were invited to participate as the control group during orientation and of those, thirty-two participated.

To assess anatomy learning acquisition during the workshop, participants completed pre-and-post assessments for each day. To assess perceptions of graduate level anatomy confidence and preparedness, participants were anonymously surveyed before and after the workshop, and after their first semester. The same survey was administered to the control group during orientation and at the end of their first semester. To assess anatomy competency, practicals scores for the first semester of the program were compared between groups.

Survey responses were analyzed using the Wilcoxon signed-rank test to assess for significant changes in student levels of self-reported confidence. Differences in workshop assessment scores were determined by a paired t-test analysis. Practical exam scores between the two groups were compared using an analysis of variance (ANOVA) test and the post hoc Tukey test. All quantitative analyses were conducted using GraphPad Prism software with statistical significance set at $p < 0.05$.

Findings and Conclusions

The following data has been collected and is currently being analyzed: anatomy acquisition assessment data collected from the study participants during the workshop; pre-and-post workshop surveys from study participants; pre-semester surveys from controls; practical assessment scores from both study groups. The following data will be collected and analyzed by the end of Dec: post-semester surveys from the groups; practical assessment scores from the second practical from both groups.

The inclusion of an anatomy workshop prior to program initiation may improve student self-efficacy and anatomy competency in a PBL-DPT program. (conclusions will be updated based on pending data analyses).



ROSENBERG SCHOOL OF OPTOMETRY

Research Week 

We are the only optometry school in the country associated with a faith-based institution emphasizing individualized attention and placing a high importance on our student's personal growth and development. In addition to our goal of graduating clinically proficient optometrists, UIWRSO is equally concerned with graduating well-rounded healthcare professionals. We challenge you to consider what it means to be a compassionate doctor and leader in the community.

Research Week 

How does your research or creative work reflect the mission and core values of the university?

UIW mission states that Christian service is perpetuated through "...scholarship, encompassing research...". Our scholastic research project aims to establish safety guidelines for a common contact lens. Through the collaborative effort of the investigators, we "...support each other..." in seeking "...thoughtful innovation..." in the eye care industry. These are in line with UIW core values of Education and Innovation, among others.

Purpose of the Study

To determine if wearing Scleral Contact Lenses (Sclerals), affect the pressure in the eyes (IOP). Sclerals are relatively large diameter (13.5mm - 20.5mm) lenses that have seen a resurgence among Eye Care Practitioners (ECP) in recent years. They provide many advantages over traditional modalities of visual correction for patients with highly irregular corneas and/or severe ocular surface disease. It has recently been suggested that because of where they rest on the eye, Sclerals may increase IOP when worn for a long time. Glaucoma, which typically includes increased IOP, is a potentially blinding disease. If Sclerals increase IOP, this would make them inappropriate lens option for most patients.

Rationale and Significance

Possible adverse effects of Sclerals on ocular physiology such as transient increase in IOP during wear has been theorized, but minimally investigated. One small study showed no significant IOP change. Another study indicated that Sclerals continue to indent the eye as much as 133.7 microns after 8 hours of wear. We hypothesize that this indentation could potentially result in enough pressure on the episcleral veins and/or Schlemm's canal, blocking the natural drainage path of aqueous, potentially resulting in elevated IOP. Given the growing number of conditions for which Sclerals are being prescribed, it is necessary to investigate any possible adverse effects, such as direct or indirect impact on IOP while the lenses are on the eye. With Sclerals, ECPs

may be inadvertently increasing the risk of glaucoma in their patients. It is important to understand the impact of Sclerals on IOP so we can manage our patients accordingly.

Description of Methodology

The principal Investigators fitted subjects with a commercially available Scleral lens in one eye and a soft lens in the fellow eye, in accordance with the manufacturer fitting guide and current standard of care. Lenses – scleral vs soft – were randomly assigned to each eye. Study protocol was approved by UIW IRB, in compliance with Human subject guidelines. On the day of the study, IOP was measured in the morning, prior to lens insertion and at the end of the day, after a period of about 8 hours of lens wear. All IOP measurements were taken with an iCare tonometer. Though Goldmann tonometry is considered the "gold" standard by ECPs, iCare tonometer measurements have been found to correlate well with Goldmann tonometry. Unlike Goldmann, iCare allows for prompt measurements of IOP upon contact lens removal. The time elapsed between lens removal and the IOP measurement was recorded. The average of 3 IOP measurements taken Pre- and post-lens wear were compared, to see if lens wear resulted in significant changes in IOP. Result for soft lens wear and scleral lens wear were also analyzes for differences.

Findings and Conclusions

Our pilot data shows a significant difference in IOP between the Soft lens eye and the Scleral lens eye after 8 hours of wear. The Scleral lens eye of our 2 patients showed significant increase in IOP from pre-lens wear value, while the soft lens eye did not show a change in IOP over the same wearing period. If this trend holds up, ECPs may need to evaluate IOP of their Scleral lens patients immediately after lens removal, a practice that is not currently being done. Patient selection and fitting strategy will also have to be modified. Additionally, lens manufacturers will have to re-evaluate lens design. Further studies are needed to determine the true mechanism for IOP change with Scleral lens wear.

How does your research or creative work reflect the mission and core values of the university?

Quality patient care is no longer just a statistical exercise in health care outcomes. It is a learned behavior which begins with the training future doctors receive while students. Part of the UIW mission involves showing dignity, respect and care for the entire person, body, mind and soul. Looking into factors which contribute to the disparities in visual acuity among the low vision population will help us to better understand the obstacles facing our patients and improve the delivery of vision rehabilitation.

Purpose of the Study

The purpose of this study was to evaluate the relationship between distance and near acuties among a low vision cohort.

Rationale and Significance

The use of distance visual acuties to predict near visual potential is common among low vision practitioners. Although low vision patients use variable working distances and optical systems to enlarge print, replicating the minimum angle of resolution (MAR) is used to compare acuity performance at different test distances. Literature reviews will produce numerous studies on the relationship between distance/near acuties among the normally sighted, but are relatively silent when comparing those with low vision.

Description of Methodology

Distance and near visual acuity, with correction, in the right and left eye were measured in 36 low vision subjects using the Early Treatment for Diabetic Retinopathy Study (ETDRS), Feinbloom and Lighthouse near acuity test charts. Test distance varied from 4m to 1m, depending on the patient's ability to resolve the target. Near acuties were measured at a working distance with respect to their habitual bifocal addition (ADD) lens power. All acuties were converted to logMAR, comparing the

relationship between visual performances at distance and near, as well as right and left eyes. Subjects who we were unable to record an acuity in either eye were excluded.

Findings and Conclusions

For our cohort (n=58), each eye was independently compared at distance and near. A two-way repeated ANOVA across test distances ($F=3.53$, $p=0.063$) found a trend towards statistical significance. Distance acuties (mean±SD, 0.80 ± 0.38 logMAR) were correlated ($r=0.52$) and on average 1 line (0.14 logMAR) better when compared to near acuties (0.94 ± 0.45 logMAR). A paired t-test was found to be statistically significant ($t=-3.55$, $p<.0001$).

Although differences in distance and near acuties were statistical significance among our low vision cohort, factors such as glare, light sensitivity, contrast and other co-morbidities may have played a role in the disparities between distance and near function. These findings may suggest a subtle overestimation clinically, when using distance acuties to predict near vision among low vision patients.

ASSESSING PERIPAPILLARY AND MACULAR VASCULATURE IN GLAUCOMATOUS EYES UTILIZING OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY

Dosch, Elizabeth, B.S.; Majcher, Carolyn, O.D.; Trevino, Richard, O.D.; Juett, David, B.S.; Sponsel, William, M.D.; & Henry, Adreain, O.D.

How does your research or creative work reflect the mission and core values of the university?

Our research project highlights UIW's core educational values while emphasizing its focus on innovation and truthfulness. The authors affirm that an emphasis on research during the initial phase of the educational process results in scholars becoming life-long learners. The authors also ascertain that life-long learning directly impacts the medical profession and society in general. The research itself is truth-seeking since its primary purpose is to uncover innovative ways to diagnose and monitor glaucoma.

Purpose of the Study

The purpose of this study is to use optical coherence tomography angiography (OCTA), a noninvasive retinal vascular imaging technique, to quantify blood flow changes that occur in eyes with glaucoma.

Rationale and Significance

Optical coherence tomography angiography is a non-invasive, dye-free imaging technique that provides volumetric vasculature and blood flow data of the retina, choroid, and optic nerve head in the eye. Data is typically viewed using en face "optical coherence tomography angiograms," each representing a 2D compression of several retinal layers. Predefined en face angiograms allow for isolation of the superficial capillary plexus of the macula and the radial peripapillary capillaries around the optic nerve head. These plexi nourish ganglion cells and the nerve fiber layer, both of which are dysfunctional and/or lost in glaucoma. The purpose of this study is to use optical coherence tomography angiography to quantify changes in peripapillary and macular perfusion in eyes with glaucoma. Quantitative vascular data may prove useful in the clinical diagnosis of glaucoma, monitoring for progression, and disease severity staging, as well as provide insight into the pathophysiology of the disease.

Description of Methodology

Subjects were nondiabetic and one eye was analyzed per subject. Glaucoma eyes had repeatable glaucomatous defects on two reliable Humphrey visual fields within the past year with cupping and/or

nerve fiber layer loss. Normal subjects had an unremarkable eye exam within the past year, intraocular pressure ≤ 21 mmHg, and normal appearing optic nerve. Subjects had 6mm optic nerve and macular optical coherence tomography angiography scans (NIDEK® RS-3000 Advance with AngioScan), Goldmann applanation tonometry, Diopsys NOVA® pattern electroretinogram and short duration transient visual evoked potential testing performed. All normal subjects underwent automated perimetry testing.

Optical coherence tomography angiography image analysis: % vessel density (white pixels/total pixels) was calculated from thresholded optic nerve radial peripapillary capillary plexus scans and superficial plexus macular scans. Unpaired unequal variance 2-tailed ttests and Pearson's correlations were used.

Findings and Conclusions

14 normal eyes and 9 glaucoma eyes were evaluated. Average age was 49 ± 10 yrs (mean \pm SD) in normals and 57 ± 13 in glaucoma subjects ($p=0.1$). Normal eyes significantly differed from glaucoma eyes in visual field mean deviation ($p = 0.01$) and average nerve fiber layer thickness ($p=0.01$). Angiography macular % vessel density was significantly lower in glaucoma eyes compared to normal eyes ($p=0.05$), while peripapillary % vessel density was not ($p=0.2$). Among glaucoma eyes, macular % vessel density was positively correlated with inferior hemifield ganglion cell complex thickness ($r=0.94$, $p=0.0001$), average nerve fiber layer thickness ($r=0.90$, $p=0.002$), and electroretinogram high and low contrast mag/magD ratios ($r=0.88$, $p=0.004$ and $r=0.81$, $p=0.01$). peripapillary % vessel density was positively correlated with average nerve fiber layer thickness ($r=0.97$, $p=0.00009$) and visual field mean deviation ($r=0.94$, $p=0.0005$).

Our results suggest that vessel density in the macula may be affected more so than that in the peripapillary zone in glaucoma. Macular % vessel density is highly correlated with ganglion cell structure/function. Peripapillary % vessel density is highly correlated with parameters used to stage disease severity.

Dark Chocolate Improves Visual Performance During Hands-Free Cell Phone Communication

Nirmanani Karunathilake, BS; Korey Patrizi, BS; & Jeff Rabin, OD, MS, PhD

How does your research or creative work reflect the mission and core values of the university?

A commercially available, highly palatable chocolate bar improves one's ability to respond in a timely and accurate manner to hands free phone calls with the goal of saving lives.

Purpose of the Study

To determine if dark chocolate can improve visual performance associated with simulated hands-free phone calls.

Rationale and Significance

Dark chocolate derived from flavanol-rich cacao beans enhances blood flow to central and peripheral nervous system sites, improves cardiovascular function and retards memory loss and other signs and symptoms of degenerative pathologies. Dark chocolate has potent antioxidant effects which retard and partially reverse age-related degenerative changes

Description of Methodology

A randomized, masked crossover design was used to assess visual performance after acute consumption of a dark or a milk chocolate bar. Testing was conducted at the Rosenberg School of Optometry. 30 normal subjects (mean age 26)

participated in dark and milk chocolate arms of the study. Subjects were unaware of the type of chocolate consumed prior to testing. Subjects were tested on color and black/white contrast sensitivity with and without verbal distraction to determine how answering a hands-free phone call influences performance.

Findings and Conclusions

Performance was quantified as throughput (CS/response time; higher values indicate better performance). Two-way repeated measures ANOVA across chocolate (dark vs. milk) and distraction (present vs. absent) showed significant enhancements in performance with dark chocolate vs. milk chocolate but post-hoc t-test analyses showed that the performance was limited to the distraction condition with significant improvements in performance across multiple color and luminance tests without distraction vs. distraction ($F = 13.6$, $p < 0.0001$). These findings indicate that acute consumption of a commercially available, palatable dark chocolate bar can improve visual performance on low contrast visual tasks. These results have relevance for military, law enforcement and other settings seeking to optimize visual performance as well as everyday visual performance.

How does your research or creative work reflect the mission and core values of the university?

Serving the community especially the undeserved and the poor is a great part of the UIW's mission.

This presentation includes a clinical case presentation of a 25 year old young female patient who has been seen in one of UIW eye clinics since 2015 and this case helps to show the important role that UIW plays in helping to ensure that the community receives a timely diagnosis and treatment for various ocular diseases in hopes of preventing permanent vision loss.

Purpose of the Study

An Atypical Case of Recurrent Uveitis

Rationale and Significance

Uveitis is an inflammatory condition which may occur in one or both eyes. It can present as an acute inflammation of the eye or may become chronic and recurrent and if not properly managed can lead to permanent vision loss. Uveitis is considered to be responsible for 10% of all cases of blindness in the US, therefore, making it a condition which requires prompt diagnosis and treatment.

Description of Methodology

The presentation includes a clinical case for a 25 year old female patient who has been struggling with recurrent uveitis in her eyes since 2012 and is currently receiving ocular injection treatments for a retinal complication which is known to be associated with recurrent uveitis, in hopes of preserving her vision as much as possible.

Findings and Conclusions

This presentation will provide some background information found in the literature regarding this ocular condition and the most well-known causes for it with an emphasis on the infectious causes since the patient has been suffering with recurrent uveitis in her both eyes despite receiving ocular injections. In this case presentation, during the patient's last visit in 2017, pupillary abnormalities were found that may indicate that syphilis may be the etiology behind the uveitis recurrences in this patient, therefore, emphasizing the importance of considering infectious causes which can lead to uveitis, which if are not investigated and properly managed, can lead to recurrent uveitis and eventually permanent vision loss from the damages caused by the inflammation secondary to a systemic infection.

How does your research or creative work reflect the mission and core values of the university?

A commercially available, highly palatable chocolate bar improves one's ability to see low and high contrast targets. Cocoa flavanol induced increases in retinal and/or cortical blood flow may underlie this enhancement in spatial vision.

Purpose of the Study

To determine whether consumption of a single dark chocolate bar improves visual acuity, Pelli-Robson large letter contrast sensitivity and/or small letter contrast sensitivity.

Rationale and Significance

Dark chocolate derived from flavanol-rich cacao beans enhances blood flow to central and peripheral nervous system improving neural and cardiovascular function, and may retard memory loss and other signs and symptoms of degenerative pathologies including due to potent antioxidant effects. In this study we explored the more immediate effects on visual performance.

Description of Methodology

A randomized, masked crossover design was used to assess visual performance after acute consumption of a dark or a milk chocolate bar. Thirty normal subjects (mean age 26) participated in dark and milk chocolate arms of the study. Subjects were unaware of the type of chocolate consumed prior to testing. Visual acuity, large and small letter contrast sensitivity were measured 1.75 hours after consumption of dark and milk chocolate bars.

Findings and Conclusions

Spatial vision scores showed a significant improvement after acute consumption of dark chocolate compared to milk chocolate ($p < 0.0003$) with greatest improvement for small letter contrast sensitivity ($p < 0.0005$). A highly palatable dark chocolate bar improves high and low contrast vision, likely due to flavanol-induced increases in retinal and/or cortical blood flow. Visual enhancement afforded by dark chocolate, particularly detection of small, low contrast targets, is important for everyday vision and for critical task performance in law enforcement, military, and sports vision.

Impact of a Vision Care Program in a Pediatric Population

Marunde, Elizabeth; Roman, Chantelle; Wingert, Timothy; O.D., F.A.A.O.; & Ottenbreit, Raelyn; O.D.

How does your research or creative work reflect the mission and core values of the university?

In providing a new type of innovational vision screening and eye care program to students of the Northside Independent School District of San Antonio, we honor our mission statement by providing quality community service. The long term goal of this project and others like it is with the hope to impact our community in allowing for students to achieve educational excellence, starting with improving visual needs.

Purpose of the Study

To determine the impact of a program that provides children who failed a vision screening with a comprehensive eye exam.

Rationale and Significance

This program provided a significant improvement in vision for these individuals and identified conditions needing further evaluation and treatment. While only addressing a small percentage of children in the NISD, it demonstrates that screening programs need follow through in order to be effective.

Description of Methodology

The Rosenberg School of Optometry conducts a program in agreement with the San Antonio Northside Independent School district to provide Comprehensive Eye Exams to their students that fail their vision screenings. Consent is obtained from their guardian to perform the exams during school hours. To determine the impact of this program, a retrospective analysis was conducted on the exam information of 717 elementary school

students seen during the 2016/17 school year. The data collected from the charts included: gender, age, grade, date of previous eye exam, entering visual acuity, exiting visual acuity, refractive error, and any other ocular diagnoses determined during the exam.

Findings and Conclusions

The data was analyzed to determine the impact of the program including improvement in acuity, amount and distribution of refractive error, and frequency of additional diagnoses. The mean improvement in visual acuity in each eye is approximately five and one half lines of acuity, some without improvement while others went from hand motion to 20/20. The results demonstrate that the students in the San Antonio Northside Independent School District benefited from the free comprehensive eye exams with a considerable improvement in their vision. Providing spectacles improves visual acuity and should translate to improvement in the classroom. By removing visual obstacles, namely by providing prescription glasses, students are able to focus on learning without the hindrance of visual deficiencies. While this study demonstrates a major impact on this specific at risk patient pool, it does not account for the prevalence of vision problems in the remainder of the school population; totaling approximately one hundred and sixty thousand students. This study is meant to be a starting point to demonstrate the importance of visual care and its relationship to academic progress in the pediatric population. Future studies should include a larger sample size and tracking academic progress from the eye exam to several months after the eye exam to determine the connection between vision and learning.

How does your research or creative work reflect the mission and core values of the university?

More accurate diagnosis of vision threatening diseases with the goal of implementing treatment at early stages.

Purpose of the Study

Our purpose was evaluate the sensitivity of a new test of dark adaptometry (the ability to adapt to darkness) developed at the UIW Rosenberg School of Optometry. We previously described the rationale and development of this test (UIW Research Week, 2016) and our purpose herein was to evaluate the sensitivity of this test for detection and diagnosis of eye disease.

Rationale and Significance

Dark adaptometry (DA) assesses the ability to adapt to darkness, comparable to what one experiences when entering a dark theater after midday sunshine. Time is required to achieve improved vision in the dark. It is measured as the minimum light intensity to see vs. time in the dark. Typically, the patient is exposed to a uniform bright field at the start to ensure that all patients start at the same level of initial adaptation. Retinal diseases can prolong the time required to adapt to darkness, as well as the intensity of light needed to see in the dark. Few facilities have the capability measure DA and it is often requested from referring retinal specialists with the electro-retinogram (ERG) which is a "gold standard" test of retinal function which measures the electrical retinal response under night and daytime conditions. Because the (ERG) requires that the patient dark adapt for at least 20 minutes in accord with international standards (www.iscev.org), we developed a DA test to be measured during this 20 minute period. In addition, we chose to alternate our stimulus for DA between red light, which better stimulates daytime (cone) cells, and blue light, which better stimulates nighttime (rod cells), to increase the accuracy of diagnosis since some diseases affect daytime vision, some affect nighttime vision, and some affect both. In this study we evaluated the sensitivity of this new test in patients tested in our Visual Neurophysiology Service.

Description of Methodology

A large white bowl-shaped stimulus (Ganzfeld) with an opening for the patient to position her/his head, was used so that flashes of light which diffusely illuminated the bowl diffusely stimulated the back of the eye (the retina). Subjects underwent 75 s of preadaptation to a bright light to ensure that all patients we initially adapted to light at the same intensity level. This was followed by 20 min of DA testing in which the intensity of the light would decrease and the patient would press a button each time she/he could see it but would not press the button if they could not. The light intensity went up and down in (like a hearing test) to determine the lowest intensity seen at each poin in time. This allowed us to determine a light intensity threshold every 1-2 minutes during the 20 minute period. Since the light alternated between red and blue, we were able to assess rod cell (night) and cone cell (day) adaptation. DA was measured in 21 normal subjects and 21 patients with retinal disease. The data from normal subjects was compared to data from patients at the 10-min midpoint and 20-min final point using between-subjects ANOVA and post-hoc t-tests.

Findings and Conclusions

At 15 min in the dark, normals and patients showed flattening of the intensity vs, time graphs indicating that no further time would improve sensitivity; hence final thresholds were achieved within 15 min. In diseases we know as night blindness (retinitis pigmentosa, RP), 100% showed significantly elevated blue DA thresholds ($2SD > normal$) at 10 and 20 min. In diseases selectively affecting daytime or cone function, 80% showed abnormal cone (red) DA at 10 min and 30% at 20 min, indicating that delayed adaptation is characteristic of cone disease. In summary, two-color DA is expediently measured during the DA phase of ERGs. The test identifies nighttime (rod) and daytime (cone) dysfunction critical for accurate diagnosis of retinal diseases. It provides an additional benchmark for detection, diagnosis and monitoring of visual function over time, as well as guidance for patients functioning in dimly lit settings

How does your research or creative work reflect the mission and core values of the university?

This work aims to search for factors that affect student learning. Flipped course approaches may promote active learning but there is limited evidence regarding its impact on student outcomes. In addition, students are expected to complete pre-class work and to come to class ready to engage in discussions. In this regards, a positive student attitude towards the flipped-course design will be desirable. This project supports educational excellence, search and communication of truth, and innovation and thus reflects our university core values and mission.

Purpose of the Study

There is a need to find ways to make basic science courses more meaningful for healthcare students, especially when face-to-face time is limited. Our hypothesis is that by asking students to become an active part in the learning process, they may be able to obtain deeper knowledge and to better identify the underlying causes of disease. The purpose of this study is to identify factors that contribute to student learning in the flipped classroom.

Rationale and Significance

Teaching basic sciences to healthcare students is challenging. Blended-learning and flipped-classroom are popular strategies aiming to stimulate higher-order thinking. Although research on active learning is conceptually supportive, there is no definitive evidence supporting flipped-classroom. The relevant literature mostly consists of descriptions of pilot studies or “how-to” papers while the experimental work is limited to small-scale studies in a few single disciplines. In this presentation, we will use a biochemistry course for optometry students as example of how we incorporated flipped-classroom strategies and evaluated the effect of pre-class work on student performance.

Description of Methodology

Flipped-course design

We delivered all course materials through Blackboard™. Each learning module started with a page that reviewed the module’s main concepts, the learning outcomes, and the assigned pre- class work. During class, we used just-in-time teaching as students worked on a scenario.

Data Collection

We collected pre-class work completion data via

Blackboard™. In-class performance was assessed via multiple-choice questions and student-matched clickers. Student perceptions regarding the efficacy of the learning strategies used in the course were collected using SurveyMonkey®.

Statistical analyses

For regression analyses with five predictors, $\alpha=0.05$, $power=0.95$, and medium effect size ($f^2=0.15$), a sample size of 138 was required (G*Power3.1.9.2.). For the bivariate correlations, the required sample size was 134. We had 197 participants.

We used Spearman bivariate correlations (IBM_SPSS_24) to identify relations between the six variables included in our study: gender, ethnicity, completion of pre-class work, in-class performance, midterm and final exam grades.

We ran a linear regression analysis with “final exam” as dependent variable and “pre-class work completed >50% of the times”, “in-class performance”, “midterm grade”, “male”, and “Caucasian” as independent variables. A path analysis (AMOS) was conducted to determine the direct and indirect effects of “pre-class work” on “final exam” using “in-class performance” as mediator.

Findings and Conclusions

The strongest predictor of “final exam” was “midterm” ($\beta=0.490$; $P<0.001$). “Pre-class work” correlated with “in-class performance” ($P=0.001$; 0.242), “midterm” ($P=0.033$; 0.152), and “final exam” ($P<0.001$; 0.256). The correlation of “pre-class work” and “final exam” was still significant after controlling for the other three variables ($P=0.03$; 0.156). The path analysis showed that “pre-class work” had both a direct and an indirect effect on “final exam”. The direct effect of “in-class performance” on “final exam” was larger than the direct plus the indirect effect of “pre-class work” (0.4 versus 0.24).

According to student perceptions, “pre-class work” ranked after “lectures” and “in-class activities” for learning effectiveness. Thus, although our data suggested that pre-class work may increase course performance, students need to buy-into the flipped-classroom concept and some initial resistance can be expected.

This study was reviewed and approved by the Institutional Review Committee of the University of the Incarnate Word (protocol # 15-08-003).

How does your research or creative work reflect the mission and core values of the university?

This work aims to study the molecular mechanisms that mediate proliferative vitreoretinopathy, a devastating ocular disease secondary to ocular trauma for which currently there is not a successful treatment. Results from this work may provide potential new avenues to inhibit vitreoretinal fibrosis and contractile responses after a penetrating ocular injury. This project supports educational excellence by involving students in research, search and communication of truth, and thoughtful innovation by contributing to the development of novel therapeutic approaches. As such, this research project reflects our university core values and mission.

Purpose of the Study

The purpose of this study is to unravel the molecular mechanisms involved in the transdifferentiation of retinal pigment epithelial (RPE) cells into myofibroblast-like cells upon exposure to vitreous.

We hypothesized that vitreous induces fibrotic changes in wounded RPE cells that will be mediated, at least in part, by changes in the expression of fibrosis-associated microRNAs. These differentially expressed microRNAs may regulate the expression of key genes involved in the phenotypic changes associated to RPE transdifferentiation into myofibroblast-like cells and thus PVR development and progression.

This study aimed to determine whether miRNAs played a role in vitreous-induced fibrosis in retinal pigment epithelial cells. We measured the changes in expression of fibrosis-associated microRNAs (miRNAs) in wounded epithelial cells cultured in the presence and absence of vitreous. Then, we used an alpha-SMA luciferase reporter assay as our screening method to search for miRNAs that may mediate RPE fibrosis.

Rationale and Significance

This work aims to study the function of microRNAs in the development of proliferative vitreoretinopathy (PVR), a leading cause of vision loss in children and young adults for which there is not a successful treatment. The formation of fibrocellular membranes and secondary retinal detachments are critical in PVR pathogenesis but the precise mechanisms underlying the phenotypic changes observed in wounded RPE cells remain elusive. Results from our work may provide potential new avenues to inhibit vitreoretinal fibrosis and contractile responses after penetrating ocular injury.

Description of Methodology

Wound healing model:

We used retinal pigment epithelial cells derived from induced pluripotent stem cells (iPS- RPE cells) as an in vitro model for PVR. iPS-RPE cells were plated onto matrigel-coated transwells and cultured for 60 days until fully confluent and pigmented. Cell monolayers were then scratched to create a wound. To recapitulate the in vivo conditions that lead to PVR, cells were treated with 5% fresh vitreous immediately after wounding. Unscratched cells without vitreous were included as controls.

MicroRNA profiling:

Gene expression of 84 pro-fibrotic miRNAs was measured by qPCR in wounded iPS-RPE cells on days 3 and 12 post-scratch. Bioinformatics analyses were performed using Qiagen's web-based resource. A 2-fold change in the miRNA levels compared to controls was used as cutoff value to identify differentially expressed miRNAs (DEmiRs).

Reporter assay:

An alpha smooth muscle actin (α -SMA) reporter assay was used to screen for potential miRNAs involved in vitreous-induced RPE fibrosis. ARPE19 retinal epithelial cells were transfected with a plasmid expressing the luciferase gene under the control of the α -SMA promoter. These cells were transfected with miRNA mimics and inhibitors of the DEmiRs identified by qPCR and the activity of the α -SMA promoter measured using a luminescence assay.

Findings and Conclusions

Focused PCR array analysis revealed a distinctive pattern of pro-fibrotic miRNA expression during wound healing in our in vitro model of PVR. Compared to unscratched cells without vitreous (baseline), differential expression of 11 fibrosis-associated miRNAs (>5-fold change, $P < 0.05$) was found in scratched iPS-RPE cells incubated with 5% vitreous (days 3 and 12). Predicted targets of these DEmiRs (TargetScan) included genes involved in fibrosis, angiogenesis, inflammation, epithelial mesenchymal transition, and tissue remodeling. The luciferase reporter assay showed increased α -SMA promoter activity in ARPE19 cells after transfection with miRNA mimics (compared to scramble microRNA controls). Our data suggested that the DEmiRs identified in our in vitro model of PVR might be involved in the phenotypic changes associated to RPE transdifferentiation into myofibroblast-like cells and thus be a marker and a prospective therapeutic target for PVR.

How does your research or creative work reflect the mission and core values of the university?

The research helps us to understand the needs of patient population to enhance their vision and function. To enable them to live independently and enhance their quality of life by giving them the ability to remain independent through vision enhancement devices that they find pleasing and effective.

Purpose of the Study

Technology has reshaped just about every aspect of our lives. But, the same cannot be said of many traditional low vision devices which have seen minimal change in the areas of design and function. The purpose of this study was to better understand the characteristics of low vision patients value when using a stand magnifier and how these improvements can guide future product development.

Rationale and Significance

The importance of the study is to bring to the literature what patients desire in vision enhancement devices. This will enable us to develop more effective devices for the industry.

Description of Methodology

Low vision subjects (n=35) participated in evaluating three illuminated stand magnifiers (ISM): a 5x Mattingly SMDedge®, a 5x Carson optical LumiLoupe, and a Comfortview®, a custom ISM. To assess the expectations of their idea 1 ISM, pre and post questionnaires of desired qualities were used. The ISMs were randomized and near visual acuities were measured with the Single Letter Lighthouse card. Following each trial, subjects rated

the magnifier's qualities using a 4 point Likert-like scale. Subjects also ranked their preferred ISM and described the attributes which drove their decision. The data was collected and analyzed using Microsoft Excel (Version 2010).

Findings and Conclusions

Initial expectations on stand magnifier function highlighted the importance of image quality (Avg. [SD]: 3.58 [0.68]), portability (3.25 [0.76]), and comfort (3.00 [0.94]) as being the three most important factors. Post evaluation criterion remained consistent with image quality being the most important factor in 49% of the patients, portability (29%) and comfort (29%) being second and third most important factors, respectively. A majority of our subjects (63%) had some prior experience with stand magnifiers.

With low vision population expected to increase, devices with the best image quality will prevail. The research were surprised that size and appearance were not as important when selecting a device. The data suggests optimal low vision magnifiers should have superior optics but not discount features such as portable and comfortable housing.

Rehabilitation of Acute Posterior Multifocal Placoid Pigment Epitheliopathy (APMPPE) with Suspected Cerebral Vascular Association

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How does your research or creative work reflect the mission and core values of the university?

Low Vision Rehabilitation optometrists aim to evaluate the functional limitations a patient may experience due to their ocular disease or condition. By prescribing advanced optical devices and using unique, individualized strategies, we are able to help patients maintain independence in their daily lives despite their visual impairments.

Purpose of the Study

Perform low vision rehabilitation on a patient with a previous diagnosis of APMPPE.

Rationale and Significance

As primary eye care providers, optometrists not only need to consider the health of the eye, but also the patient's vision on a functional level which may be diminished in many eye diseases. APMPPE is a rare, inflammatory retinal condition and many practitioners may not be aware of the condition or the visual sequelae associated with APMPPE. Additional ancillary testing is necessary to determine the level of functional vision loss, such as contrast sensitivity testing with filter evaluation, visual field testing and optical coherence tomography. This will allow the optometrist to develop rehabilitation strategies that are individualized for the patient.

Description of Methodology

A 23 year-old Hispanic female with a previous diagnosis of APMPPE and a history of stroke presented for a low vision evaluation. She had a complaint of floaters in her eyes for the last three weeks that were noticed more in the left eye and seemed to be progressive.

She also reported persistent light sensitivity indoors. Her best corrected visual acuity after refraction was 20/30 in each eye. The Humphrey visual field testing showed a right inferior quadrantanopsia. Contrast sensitivity testing was slightly reduced to 1.35log in each eye. The reduced visual acuity and decreased contrast sensitivity are consistent with her retinal diagnosis of APMPPE and her visual field defect is consistent with her history of stroke.

Findings and Conclusions

The patient was prescribed a light grey filter in her glasses to decrease symptoms of light sensitivity indoors. Driving laws and recommendations were reviewed with the patient since she was currently still driving. Due to her visual field loss, a behind the wheel assessment was advised and she was educated on scanning strategies to minimize fall risk. This unique case is significant in the fact that not only does the patient demonstrate a rare, inflammatory retinal condition, but she also has a history of stroke. It was unknown at the time the patient was seen whether the cerebral vascular event was associated with APMPPE. After literature review, it is plausible they are related as several case reports show an association between APMPPE and neurological manifestations including cerebral vascular accidents.

Role of dopamine receptors in retinal microvascular endothelium communication

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**indicates that both authors contributed in the same extent to this project and should both be considered first author*

How does your research or creative work reflect the mission and core values of the university?

Innovative research in the area of health care broadens the scope of service to others. This project seeks to identify mechanism of action that could be utilized in the treatment of diabetes, a disease that greatly affects US and specially our San Antonio population. By investigating this and other health issues we offer our knowledge and dedication and represent the core values of truth and innovation by reporting the results of our novel investigation, and community service because of the impact of our research in the community.

Purpose of the Study

The purpose of this study is to address whether retinal vascular endothelium is under dopaminergic control. We hypothesize that activation of dopamine 2 receptors (D2Rs) on human retinal microvascular endothelial cells (HRMECs) modifies gap junctional intercellular communication (GJIC) between HRMECs through a cyclic AMP (cAMP) pathway.

Rationale and Significance

A very early injury in diabetes is damage and cell loss of endothelial cells (ECs) lining retinal capillaries, an injury which is implicated in diabetic retinopathy (DR). Gap junctional intercellular communication (GJIC) among retinal ECs has been shown to be an important contributor to EC survival in high glucose culture conditions, a culture model of diabetes. In the retina, GJIC among many neuronal populations can be modified by dopamine receptor activation through a cyclic AMP (cAMP) to protein kinase A (PKA) pathway. However, whether the same pathways control GJIC among human retinal microvascular ECs is unknown.

Description of Methodology

We evaluated dopamine receptor gene expression in HRMECs with qPCR (BASiC core facility, UTHSA) using primers for all 5 known dopamine

receptor genes (DRD1-5). Dopamine receptor protein expression (D1-5R) in HRMECs was tested by normal electrophoresis, blotting, and immunodetection methods. We tested for GJIC in HRMEC cultures using a modified scrape-loading assay. Primary HRMECs (CSC, Inc.; Kirkland, WA) were cultured prior to passage 8 in medium with growth factors and 10% serum. At confluence, each dish was incubated for 30 minutes with the D2R agonist quinpirole (50 nM, n = 6), the adenylyl cyclase activator forskolin (50uM, n = 3), or vehicle (n= 14). A sterile needle (23G) was used to scrape the bottom of the culture dish in the presence of 0.5% neurobiotin (NB; Vector Labs). After 5 min, cultures were fixed and labeled with streptavidin conjugated to Alexa-488. GJIC was detected by fluorescence, with the scrape positioned on one side of the microscopic image field. Custom scripts (ImageJ) were used to generate a profile of average fluorescence vs. distance from the scrape for each collected image. The more open gap junctions in the cultures, the farther the distance NB will travel.

Findings and Conclusions

We found DRD5 > DRD1 > DRD3 > DRD2 gene expression in HRMECs; DRD4 was not detected. Qualitative protein detection revealed good expression of D5R and D2R. D3R was weakly expressed, and D4R protein was not detected. Despite the expression of DRD2 in HRMECs, treatment with quinpirole did not increase GJIC (92.6 vs \pm 16.0 vs 88.7 \pm 10.6 quinpirole vs vehicle treated), while forskolin appeared to increase GJIC (165.8 \pm 19.6 vs 88.7 \pm 10.6 forskolin vs vehicle treated). These preliminary results suggest that cAMP mediates the opening of gap junctions in HRMECs. The lack of response to DR2 activation suggest that the gap junctions may not be open in our current culture conditions and further investigation should be performed.

How does your research or creative work reflect the mission and core values of the university?

Fostering skills such as empathy among optometrist may improve work engagement, doctor-patient communication and satisfaction, and treatment compliance. As we continue to train future eye care professionals we seek to create experiences for our students to make meaningful connections with their patients and expand their understanding of patient centered care and concern for the whole person. This study utilizes emerging technology to help create these experiences.

Purpose of the Study

The purpose of this study was to evaluate the empathy levels of optometry students before and after the use of low vision simulators (LVS) rendering moderate macular degeneration in conjunction with low vision training (eccentric viewing and independent cane travel).

Rationale and Significance

Fostering skills such as empathy among optometrist may improve work engagement, doctor-patient communication and satisfaction, and treatment compliance. A common method to evoke empathy, “blindness simulation”; are often misleading and highlights the initial shock of becoming blind rather than the adaptation process which follows. These experiences have left participants feeling sympathetic and lowering their expectations of the visually impaired (VI).

Description of Methodology

A pre/post-test questionnaire, modified from the Social Responsibility about Blindness [Likert] Scale, was performed to assess the attitudes and underlying expectations subjects had regarding the VI population. Distance visual acuity in the right, left, and both eyes were measured using an Early Treatment of Diabetic Retinopathy Study (ETDRS)

chart, best corrected and with the LVS, respectively. Subjects’ mobility, using the LVS, was also assessed on a pre-determined route. Each subject then received eccentric viewing training verbally and practiced identifying facial features of common celebrities. Distance acuity with the LVS were measured after the eccentric viewing training. Subjects also received white cane training (identifying obstacles) and re-walked the course using the white cane. Times with and without the cane were evaluated. Quantitative analysis of survey responses were performed using Sheets (Google Inc., 2017). Averages, standard deviation and two-tailed t tests were performed for the descriptive categories to determine statistical significance ($p < 0.05$).

Findings and Conclusions

All participants (n=23) were 2nd or 3rd year graduate students in the optometric program. The average age was 25.2 years and 87% were female. 30% of our participants had some prior low vision encounter. We found a 14.49% increase ($p=0.002$) among participants interested in practicing low vision upon graduation. Positive statements regarding VI's ability to work and live independently improved, but only reached statistical significance measuring the motivational impact on others ($p=0.002$). Negative statements regarding the loss of vision and independent living varied, none reaching statistical significant.

Our data suggests simulations with low vision training may positively influence a student’s decision to practice low vision, develop a greater appreciation for the challenges VI's face and help create better “blindness simulations.” We found no significant negative impact regarding the expectations or abilities of VI's. As we prepare future doctors, well designed simulations may foster greater empathy and improve health care delivery.



Research Week