

5th Annual Simpson Student
Research Symposium
Presentation and Poster Abstracts

[Updated 3/4/2015]

Saturday, March 7th, 2015
9:00am to 5:00pm

LaBaume-Rudat Hall
Simpson University
Redding, CA

Contents

| | |
|---|---|
| Student Presentation Abstracts (9 total)..... | 2 |
| Student Poster Abstracts (6 total) | 6 |

Note: Names are listed alphabetically by the presenter's last name. For presentations with more than one presenter, the first presenter's last name is used.

Student Presentation Abstracts (9 total)

Name: Katie Christy, Casey Maurer, Dawn Draeger, Priscilla Horch, Jonathan Lowdermilk, and Shalyne Schulz

Degree Program: Business

Presentation Title: “Outsourcing: A Movement”

Presentation Abstract: This is a summary of the history of outsourcing as a recent trend in business strategy and a discussion of the ethical concerns regarding outsourcing. There are several forms of outsourcing which serve different functions for organizations. Outsourcing has only been a business strategy since 1989. It has developed due to the many advantages of the strategy, but like any strategy, it has disadvantages associated with it as well. It has also come under criticism because of the ethical implications in recent years. As it appears now, outsourcing is going to continue to be a business strategy, because it can serve to help a struggling company turn itself around. In the end, the goal of a business is to make a profit, and outsourcing can help a business succeed in this area, but sometimes at the cost of satisfied customers.

Name: Daniel Dixon

Degree Program: Cross-Cultural Studies – Community Development

Presentation Title: “The Magnificat and *Missio Dei*: Mary's Song of Praise and God's Movement in the World”

Presentation Abstract: Mary's song of praise in Luke 1:46-55, also commonly referred to as the Magnificat, contributes to a deeper understanding of the *Missio Dei*, the mission and movement of God in the world. My research examines the content of the song itself as well as the person of Mary, a young woman in a patriarchal society. She praises God and portrays him as being actively involved within the world, being a God who moves. Mary locates her own experience within the scope of God's universal movement in the world, beginning by praising God for how he has “done great things for me” and then describing God's mercy as extending “from generation to generation” to those who are humble and fear him. Mary's vantage point is note-worthy, not only because she is a young woman, but because the content draws from Old Testament themes and foreshadows the mission of Jesus and the church, showing continuity in God's actions throughout time. Overall, my presentation is an examination of Mary's song and the contributions to *Missio Dei* that can be drawn from her own portrayal of God's mission and movement in the world.

Name: Elena Kurian

Degree Program: Spanish

Presentation Title: “The Process of Second-Language Learning and its Benefits”

Presentation Abstract: This research project examines the way in which people acquire a second language. It encompasses the language-learning process, hindrances to language acquisition, and different teaching methods used to facilitate second-language learning. The project also addresses the beneficial cognitive and psychological effects of learning a second language, as well as the potential impact that knowing a second language can have on the life and worldview of an individual.

Name: Mathew Jones

Degree Program: History

Presentation Title: “An Ace of Hearts: Germany's Top Fighter Pilot”

Presentation Abstract: This paper examines the career of Manfred Von Richthofen, more commonly known as the Red Baron, by analyzing his autobiography, *The Red Battle Flyer*. By analyzing this text and other relevant secondary sources I try to answer the following questions: In what ways did Richthofen believe he was helping the war effort and what does this reveal about the role of aircraft in World War I? Throughout the course of the paper I provide evidence to suggest that Richthofen thought he had a physical effect on the war as well as a deeply physiological one. Through this the role of aircraft as an invention of wonder and terror is revealed.

Name: Alexander Kalau

Degree Program: Accounting/Business Administration

Presentation Title: “The Move towards Welcoming Millennials”

Presentation Abstract: Movements are what introduce waves of change that could either cripple an organization or strengthen it. A fairly new occurrence flooding the market place is the influx of a new generation referred to as Millennials. Through researching the available literature written about Millennials, I endeavor to reverberate these studies and address this new challenge to companies and the changes that are beginning to occur due to the influx of a Generation Y labor force. This movement presents an untried occasion for businesses to adjust and grow as they come to understand this new demographic, and how to recruit, retain, and develop them.

Name: Brittany Mattingly, Hanah Rowan, Kathryn Paradis, Chelsey Jauregui, Brooke Mejorado, Michael C. Smith, Kayla Holland, and Carley Jones

Degree Program: Biology

Presentation Title: “Response to Growth Factors in Mouse Fibroblast Cells”

Presentation Abstract: Growth factors tell the cells of your body when to grow and divide. What would happen if growth factors were removed from cells, and added back later? How long would it take for the cells to respond and begin dividing again? There are many steps that need to happen before cells start dividing, one of which is that they modify a protein known as ERK by adding a chemical called phosphate to it. This triggers the cell to alter the way it uses some of its genes. We wanted to know how long it takes the cell to make these changes in response to growth factors. We chose to study these events using mouse cells growing in Petri dishes, so we used a mouse cell line known as NIH-3T3. We deprived the cells of growth factors for long enough to switch off cell division processes, then re-introduced them. At various time points, we collected either protein or RNA samples. We examined the timing of ERK phosphorylation by using a technique called the Western blot, and found that this protein modification took place within 3 minutes of replacing the growth factors. To study how fast cells change the ways genes are used, we chose four genes that are expressed at higher levels in response to growth factors. We used a technique called semi-quantitative RT-PCR to look for evidence of these genes’ mRNAs in each sample. For three of the genes, we found increased mRNA levels at 45 minutes.

Name: Melanie Shank

Degree Program: Liberal Studies and Social Science

Presentation Title: “Superman: The Face of American Patriotism During World War II”

Presentation Abstract: My research topic explores the relationship between the comic book character Superman and American patriotism during World War II. I believe that this topic is important to the cultural history and identity of the United States because of how Superman reflects the political, social, and economic ideals of the U.S. surrounding the tragic events of the Great Depression and World War II. I performed this research by evaluating several secondary sources, including journal articles from psychologists and cultural history experts. I have also included many primary sources in the form of original comic books and covers published between 1938 and 1945. By including various sources in my research I believe that I have made my argument clearly while including several different perspectives. My conclusion is that Americans can learn about their nation’s history and identity by reading the Superman comics published during World War II. Through my research I found that Superman inspired American patriotism through his adventures that frequently included representations of the Axis powers and international conflicts that occurred during the war. Because Superman was so popular among both adults and children, Superman’s creators, Jerry Siegel and Joe Shuster, were able to inspire all Americans to do their part in achieving justice and peace in the world.

Name: Justin Thomason

Degree Program: History

Presentation Title: “Theodore Roosevelt's ‘Battle for the Lord’: Blending Christianity and Socialism During the Progressive Movement”

Presentation Abstract: A study into the religion of Theodore Roosevelt and how his beliefs shaped his social agenda and use of government power. The main argument is that Roosevelt held firmly to Christian principles and beliefs, which were then transplanted into the public realm as a practical application. The essay draws upon a number of Roosevelt's own writings and speeches as well as the writings of historians from the last century.

Name: Eric Wheeler

Degree Program: History

Presentation Title: “Sixty-Seven Words that Changed the World”

Presentation Abstract: The paper that I will be basing my talk on revolves around the topic of the Balfour Declaration and it's continued citing as source of the modern conflict in the Middle East. This research was done in a historiographical manor to track how peoples have viewed the importance of this document since its inception. The talk will detail how the ideas surrounding the declaration have changed over the period of the last century.

Student Poster Abstracts (6 total)

Name: Abigail Bairrington

Degree Program: Biology

Presentation Title: “SU Pond Fall Survey of Aquatic Organisms”

Presentation Abstract: This project is to study the diversity of microscopic organisms in Simpson University’s pond. The organisms found in each sample were identified and recorded. The results are displayed as a Shannon Diversity Index with a list of classified organisms and their scientific names. In addition, water quality of the pond for temperature, pH, and turbidity was observed and recorded using a temperature probe, a pH probe, and a Secchi disk.

Name: Moriah De Leon and Amanda Jones

Degree Program: Psychology

Presentation Title: “Student Study Habits”

Presentation Abstract: It has long been assumed that the library is a more conducive environment for studying than most other places. Researchers decided to test this theory by observing individuals studying in two very different places: the library and dorm lobbies. Researchers observed individuals in both environments who came into the place (lobby or dorm) after the researcher. We observed the type of distraction and the amount of distractions each person had throughout the duration of their study time was recorded. Research showed that the library was indeed more conducive for studying as it decreased the amount of distractions, however not as much as originally expected. Further research should be done in this area to see if the number of people in a group of students studying affects the overall data and if group settings makes where you study not as important.

Name: Cameron Greilich

Degree Program: Psychology

Presentation Title: “Same-sex Parenting and Its Effects on Children”

Presentation Abstract: Homosexuality, and everything in relation to the subject, is one of the most controversial topics that culture debates on in this present time. The question of whether or not same-sex couples should raise children is another source of contention. This literature review is designed to examine sources of research in order to find if there are any positive or negative effects on a child’s development when raised by same-sex parents. With few exceptions, it would appear as though there are no significant differences between children of same-sex parents, and those of heterosexual

parents, in many areas related to affect, behavior, and cognition. However, there are limitations in the research, such as most studies relying on convenience samples that are non-representative of the total population of same-sex parents, the samples provided are often small, and data are rarely collected from children as a direct source. These limitations should be questioned as to whether or not they influence the data, but hopefully, these limitations will lead to further investigation and research in the future.

Name: Sarah Stewart

Degree Program: Psychology

Presentation Title: “Self-objectification Among Young Adult Women”

Presentation Abstract: In today’s culture that is consumed by media, technology, and productivity, the average woman is quickly demeaned and deplored into the dangerous world of objectification. These spheres of influence abuse potentially positive opportunities for social justice and change, but instead, delve into shallow thought and habit. Even more interesting, this world of objectification hits deeper than just the societal view of women because more women are rapidly self-objectifying themselves to meet the impossible standards of an inauthentic ideation of “woman”. The manifestations of self-objectification affect the average young woman in every area of life as she begins to view herself in the third person as an object for the judgment of others. Self-objectification often presses greater stress on the outward appearance which creates interesting repercussions for the average young woman. This poster discusses the consequences of self-objectification among still-developing young adult women as self-objectification intrudes on the areas of emotional development, cognition and efficacy, social relationships, and physiological health.

Name: Bailey Tompkins

Degree Program: Psychology

Presentation Title: “The Effects of Mercury on Prenatal Development and Early Childhood”

Presentation Abstract: Exposure to mercury can come from the consumption of fish, various vaccines and fungicides used in agriculture, and also from dental amalgams that can release mercury vapor into the oral cavity. At low levels, mercury exposure is not an issue, but when the exposure becomes more concentrated or prolonged it can lead to the cognitive, neurobehavioral and biological effects of mercury poisoning.

Name: Carolyn Wong, Adam Wilson, and Alexiz Valdez

Degree Program: Psychology

Presentation Title: “Gender Differences in Safe Driving”

Presentation Abstract: There is a well-known cultural stigma regarding female drivers. Female drivers are presumed to be worse drivers than men. We wanted to disprove the theory and we decided to test this stereotype by observing drivers’ behaviors when making a right turn at a red light. There were three categories: stopping (good driving behavior), rolling (poor driving behavior), and stopping for traffic (neutral). We took note of both the drivers’ gender and behavior and recorded 153 participants, 80 men and 73 women. The results were nearly identical between male and female.