Effective Customer Relationship Management to Increase Revenue of Retail Stores

Faculty Mentor: Hamid Pourmohammadi, HR

Retail stores are among the world’s leaders in customer relationship management (CRM). The key to their success is having an efficient supply chain. Over the years, retail stores have provided their customers with a variety of products when they want them, where they want them and at the lowest prices. This project will be based on the study of how retail companies, like Target, have been able to sustain their supply chains’ continued growth and success, and provide suggestions on how they can maintain their growth through CRM. Four key components responsible for their success include: cross docking and distribution management; technology; vendor partnerships; and integration. Aside from these components, the success of retail stores relies on their generosity of data sharing with their suppliers and vendors, as well as applying the just-in-time strategy to their logistic systems. Although these key elements have contributed to their success, we will also look into retail stores’ supply chain effectiveness and how it can be improved. A SWOT analysis will be performed, focusing on retail stores’ strengths, weaknesses, opportunities, and threats. This analysis will be utilized to make suggestions regarding the supply chain improvements. Questionnaires, quantitative research and an analysis of some of the retail stores customers such as Target reveals the need to implement effective CRM strategies to increase efficiency within the retail store supply chain.

Psychoeducational Program to Reduce Stigma Associated with Mental Health among Hispanics: A Proposal

Faculty Mentor: Marisela Chavez, Chicana/o Studies

Stigma attached with mental illnesses has become the most prevalent issue preventing people from all ethnic minority groups from seeking mental health services (Kramer, 2009). The National Survey on Drug Use and Health reported that only 6.8% of Hispanics in the United States utilized mental health treatment, the second lowest behind Asians, listing economic barriers, lack of awareness about a mental illness, and stigma associated with mental illnesses as reasons for this underutilization (SAMHSA, 2008). Studies have shown that through education one can increase literacy of mental illnesses and reduce stigmata (Lopez, 2009). The purpose of the proposed study is to decrease stigma associated with mental illnesses through education. This study will be conducted on California State University, Dominguez Hills Spanish-speaking students (n=100). The students will be given two likert-scale pre-tests: Attitudes to and Stereotypes of Mental Health Measure which measures perceived public stigma, personal stigma and stereotype awareness, and the Stigma Scale for Receiving Psychological Help (SSRPH) to assess the participant’s stigma of receiving mental help. They will then be shown a 35 minute psychoeducational program that aims to increase psychosis literacy. After the psychoeducational program they will be then given two post-tests: the SSRPH and the Attribution Questionnaire which gives a vignette of a person suffering from a mental illness, then asks questions about their perceived stigma and stereotypes. The aims of this study are to validate the efficacy of reducing stigmata of mental illnesses through the psychoeducational program and reducing the stigma surrounding mental illnesses among Hispanics. The findings of this study could then be transferred to other schools, ethnicities and age groups to help reduce stigmata of mental illnesses.
Predicting Real Life Events: The Impact of Critical Thinking Ability and Social Desirability

Faculty Mentor: Heather Butler, Psychology

Critical thinking is held with great esteem in academia, but is critical thinking important for our everyday life? While many emphasize the importance of critical thinking, some have argued that critical thinking is just the new buzzword and that there may not be real world implications of critical thinking. Prior research (Butler, 2012) found a relationship between critical thinking and real life events and concluded that critical thinking may play a role in our everyday lives. The current study extended the previous research by examining positive life events and controlling for a possible confound (the tendency to respond in a socially desirable way). College students (n = 145) completed a critical thinking assessment (HCTA), an inventory of positive and negative life events, and a social desirability scale. The HCTA consists of 20 everyday scenarios; measuring five facets of critical thinking. The life events inventories were self-report, behavioral inventories of negative (e.g., paying a late fee for returning a movie late) and positive (e.g., getting insurance rate lowered because of good driving) life events. The social desirability scale consisted of 33 true/false questions that measure an individual’s tendency to respond in a socially desirable way. There was an inverse relationship between the proportion of negative life events experienced by the respondents and scores on the critical thinking assessment (r = - .28). Those with higher HCTA scores reported fewer negative life events. There was no relationship between HCTA scores and the occurrence of positive life events (r = -.11). A hierarchical regression was conducted to control for social desirability. Even when controlling for tendencies to respond in a socially desirable manner, scores on the critical thinking assessment predicted the occurrence of negative life events (R = .37, F = 10.75, p = .001). The results replicate the previous findings and control for an important confound.
Claudia Aguilar, Psychology

The Relationship Between Narcissism and Posting Delinquent Behavior on Social Media

Faculty Mentor: Larry Rosen, Psychology

Social media platforms afford people the ability to publicly update their family and peers about their life events. More surprisingly, social media has also become a place where people have shared their illicit activity. Often, an individual’s decision to post unlawful activities on social media, whether it was to brag or confess, has eventually led to their arrest. Previous research has found that individuals with high levels of narcissism not only engage in more frequent Facebook use, but narcissism has also been found to correlate significantly with delinquent activity. However, the literature on sharing illegal activity online is scant and further investigation is needed to understand the mechanisms behind this oversharing behavior. The purpose of this study was to further explore this phenomenon and examine whether there is a relationship between narcissistic personality traits and posting delinquent activity on social media websites. The sample included adults (N = 625) between the ages of 18 and 74. An online questionnaire assessed an individual’s narcissistic personality traits, social media and technology use, sensation-seeking behavior and self-reported delinquent behavior. Results showed that although there wasn’t a significant relationship between narcissism and posting delinquent activity on social media, exhibitionism, a narcissistic subscale, significantly predicted posting delinquent behavior on social media but entitlement or exploitativeness, two additional subscales, did not. Also, gender was not a significant predictor of posting delinquent behavior on social media. The results of the study suggest that narcissistic personality as a whole is not a factor in posting delinquent activity on social media but that exhibitionism might be a factor. These findings have implications for the criminal justice system to better assist law enforcement since social media is being used for criminal investigations.
Student Research Day 2015 - Abstracts

Karina Aguilar, Daniel Ennaco, Psychology

The Effects that Age and Time of Day have on Compassion

Faculty Mentor: Steven Frieze, Psychology

According to literature, compassionate love leads to the most desirable outcomes, specifically in the lives of those that receive it. The current study will investigate the relationship that compassion, and life satisfaction play in monetary giving. The role of age and time of day will be explored by conducting a 2 (elder or adolescent) x 3 (morning, afternoon, evening) factorial design study. In the current study, participants will be randomly assigned to one of six possible conditions. First, participants will be instructed to read a vignette describing a homeless individual of a certain age (first variable manipulation) asking for help during a specific time of day (second variable manipulation). After reading the vignette, participants will answer a series of questions related to the vignette, complete the Compassionate Love for Humanity scale, Satisfaction with Life Scale, and demographic questions. It is hypothesized that individuals that have higher compassion and life satisfaction will report the highest giving across all conditions. In addition, it is hypothesized that individuals that read a vignette about a homeless elderly person asking for money in the morning will report higher giving than those that read a vignette describing any other experimental conditions. The current research holds potential to shed light on the need for compassion and life satisfaction in the world we live. Understanding the role that such constructs play in helping those around us, may help further understand how to foster pro-social behavior. Likewise, a better understanding of the mechanisms that promote compassionate giving can inform training programs aimed at preventing maladaptive responses to opportunities to help those in need. This study seeks to gain an overall understanding of how these concepts aid an individual’s pro-social behavior development.

Claudia Alcaraz and Shayenne Morales, Psychology

Mastering Student Learning Outcomes

Faculty Mentor: Mark Carrier, Psychology

This project is focused in learning whether students are actually obtaining all of the learning outcomes each program has clearly stated in their objectives. Obtaining this information is vital for the university’s credibility. The ultimate goal for this project is to obtain as much accurate information regarding student’s engagement and knowledge obtained in their academic and professional development. Cal State Dominguez Hills is known for preparing their students for the real world challenges in their career. The University’s assessment plan and policy, asks that all programs create program learning outcomes and deploy measures to gather data about the achievement of the outcomes. Each program has a specific way of assessing whether their students are learning all of their program objectives. However, little concrete evidence exists about the types of measures used by various programs. An aggregate list of assessment measured used on campus could help to identify “best practices” with regard to assessment as well as identify measures that could be improved. This accomplishment will be conducted by analyzing all of the programs’ annual assessment reports that the program heads have submitted from the 2012-2013 academic year, to create a master assessment survey for the entire university. The researchers have combined the individual programs’ data into one by combining all of the matching categories. They are looking for the utter most accurate results. Enhancing the university’s communication between professors, students and administrators is one of the secondary goals of this project.
Basil Alhakami, Computer Science

Integrating Data Aggregation and Data Distribution in Sensor Networks

Faculty Mentor: Bin Tang, Computer Science

Wireless sensor networks consist of spatially distributed sensors that monitor the physical and environmental conditions, such as temperature, humidity, and sound etc. When sensor networks are deployed in remote or inhospitable areas, it is not possible to place a long-term base station with power outlet to collect data. Therefore, the collected data has to be stored within the network and wait to be uploaded when an upload opportunity becomes available. Unfortunately, when the limited storage capacity of the network is exceeded by the size of the generated data, discarding valuable data becomes inevitable. To overcome this issue, existing research employs data aggregation techniques to reduce the overflow data size, and then distributing the data from data generating sensors to sensors with available storage. In this work, we combine the aggregation and redistribution steps into one stage in order to reduce energy consumption. We design three algorithms and show via extensive simulations that they achieve more energy efficiency than the existing approach.

Intisar Alshammari, English

The Education of the Other in Mary Shelley’s Frankenstein

Faculty Mentor: Debra Best, English

As the daughter of Mary Wollstonecraft and William Godwin, Mary Shelley lived in a family that valued education and believed in its importance in empowering individuals, especially women. As a consequence, education is one of the main themes in Mary Shelley’s Frankenstein. It is interesting to trace each character’s learning process and the methods s/he uses in order to receive the education. However, there is a clear difference in the outcome of each educational journey. Some education, such as Victor’s and the creature’s, causes catastrophe while other education brings acceptance and stability, like that of Safie the outsider brought into the Delacey’s family in the middle of the novel.
This paper will focus on the education of the creature and Safie who both enter the society as outsiders or others. This paper aims to highlight the way Mary Shelley, influenced by Mary Wollstonecraft’s ideas of proper education, makes Safie’s education an example of this ideal learning process.
**Student Research Day 2015- Abstracts**

**Andres Alvarado, Art History/Communications**

In Search of a New Home: Contemporary Art and Migration

Faculty Mentor: Kathy Zimmerer, Art

Crossing Borders: Stories of Migration in Contemporary Art explores works of art that contain immigration and migration as their central theme. Works of art from the Latino artists Eric Almanza, Ramiro Gomez, Nery Gabriel Lemus, Oscar Magallanes, Antonio Pelayo and Consuelo Jimenez Underwood will be discussed. The works of art range from a series of paintings, prints, pencil drawings as well as a large-scale mixed media installation. These artists focus on fundamental themes that we encounter on a regular basis, yet are under the radar in twenty-first century American society. Immigration has remained a controversial topic within the United States, in particular with those states that border Mexico: (California, Arizona, New Mexico, Texas). Along with immigration come other issues that immigrants struggle with: racial profiling, stereotypes, discrimination, fear, self-identification, classification, and political injustice. Immigrants who have suffered the repercussions firsthand know the struggles and complexities of the issue. These artists have created their artworks with the intent to give a better understanding of these controversial themes. Some of these artists may have witnessed and experienced the struggles of immigration firsthand. Through their works they are truly free to express themselves and tell their stories. The research topic, Crossing Borders: Stories of Migration in Contemporary Art, encompasses important themes pertaining to our daily lives. Every piece is not simply a work of art, but a symbol of different stories and experiences. These works of art not only show the stylistic aspects, but they go deeper and invite the viewer to further analyze the composition in order to uncover the hidden layers of meaning.

**Carina Alvarenga, Health Science**

Asthma and Traffic Related Air Pollutants

Faculty Mentor: Archana Sharma, Health Science

According to the Census Bureau’s population estimates, over 9 million people reside in Los Angeles County. Of these 9 million, approximately 1,221,000 children and adults have been diagnosed with asthma. Research has shown that asthma is correlated to air pollution and recent studies suggest that there is an association between asthma rates and traffic pollutants. Los Angeles is a highly populated county with high rates of traffic congestion, thus adding to the detriment of air quality in Los Angeles neighborhoods. My study aims to demonstrate the prevalence, incidence, and mortality rates of asthma of individuals who live in areas with high traffic congestion by plotting this data using Geographical Information Mapping system (GIS). In efforts of correlating traffic related air pollutants in neighborhoods near popular highways and highly congested areas such as downtown Los Angeles.
Nick Alvarez-Jeyy, Erika Borska, and Taryn Erickson, Occupational Therapy

History of Fear of Falling in Community-Dwelling Older Adults

Faculty Mentor: Claudia Peyton, Occupational Therapy

Fear of falling (FOF) is a significant psychological phenomenon that impacts the lives of many older adults. The purpose of this study was to understand the history of fear of falling in community-dwelling older adults ages 65 and older. Six community-dwelling older adults ages 65-85 with a self-reported FOF or expressed worry related to falling were recruited. Narrative inquiry was used to derive a chronological account from the perspective of the participants living with a fear or concern for falling. Researchers examined past, present, and future dimensions of time that surround this fear for each older adult. The impact and meaning falling may have in each participant’s life was also explored. Results indicate that development of FOF was similar among participants and stemmed from personal or vicarious experiences of falling, an injury, or an illness. All participants expressed taking several precautions to prevent a fall, including modifying their environment, behavior, or activity selections. Moreover, all participants described a loss of independence, needing to rely on others for support, and a foreseeable decline in their activity levels as being potential results from a future fall, illness, or the natural process of aging. Interestingly, all participants reflected hesitation in identifying themselves as someone who is “fearful of falling” and preferred to describe themselves more proactively as someone who is “cautious or careful” about falling.

Glenda L Ampie, Business Administration

Philip Knight

Faculty Mentor: Gary Polk, CBAPP

It was a simple form of poetry to describe the life of a successful business person. I chose the story of Philip Knight the CEO of a Fortune 500 company, Nike. The Bio Poem was a structured collection of vivid details about Philip Knight’s life, personality traits and aspirations: a portrait in words. In creating the Bio Poem I intended to present vivid details, which revealed interesting aspects that described his origin, managerial style, and his commitment to social responsibility. I also described his character, his accomplishments and his failures. In writing this Bio Poem I learned that Phillip Knight is a leader and innovator. In less than a decade, his marketing savvy and uncompromising competitiveness had transformed the athletic-shoe industry and made Nike one of the most successful and widely recognized brand names in the world. Philip Knight taught me that continuous innovation is key, and if you want your company to be the best you can’t be afraid to take chances.
In the United States, diabetes affects 25.8 million people of the population. Specifically, Latinos are at a 66% higher risk for developing diabetes compared to non-Hispanic Whites (Center for Disease Control, 2010). The daily activities of managing diabetes, such as taking medication, monitoring sugar levels, preparing healthy meals and increasing physical activity (Laroche, Davis, Forman, Palmisano, Reisinger, Tannas, Spencer, Heisler, 2009) can be taxing to one’s physical and mental health (Kadirvelu, Sadasivan, Ng, 2012). In the Latino culture, informal caregiving is common and Latinos are less likely to choose professional/formal caregiving and prefer informal caregivers than the non-Latino Whites who were more likely to rely on formal/professional caregiving (Min, & Barrio, 2009). The purpose of this phenomenological research is to explore the lived experiences of Latino college students who serve as informal caregivers in the lives of relatives with type 2 diabetes. The research was comprised from a larger study of Latino undergraduate and graduate students from California State University, Dominguez Hills from various disciplines. Twelve focus groups were directed by the principle investigators. A total of 32 Latino participants comprised the focus group session. Interviews lasted approximately 60 to 90 minute with participants engaging in a group discussion concerning diabetes. The current study will specifically analyze and code responses from the following content areas: effects of diabetes on family functioning and level of involvement in caring for afflicted relative. The researchers expect to find students’ responses regarding their roles and responsibilities as well as their perceptions in diabetes care of a relative. Specifically, responses will generate understanding of students’ level of personal involvement, emotional distress, and perceived effects of diabetes on the family. The implications of this study may provide insight towards generating culturally-tailored support groups for individuals who are caregivers or spectators to their relatives affected by diabetes.

The purpose of this study was to explore the lived experiences of caregivers of people with Down syndrome. Down syndrome is the most common genetic intellectual disability currently effecting 400,000 people in the United States. Family members and professionals act as caregivers for these individuals to help them navigate daily life. The experiences of six caregivers were explored using the phenomenological approach with semi structured interviews. Significant statements from the interviews were analyzed using the Nvivio software for data reduction. The data found significant statements regarding constant care, social support, and advocating for individuals with Down syndrome. The essence of caregiving revealed from the research includes a lack of leisure time and an increased need for self-care, areas which can be addressed through Occupational Therapy.
Christina Arzate, Health Sciences

The Association of Victimization on Adolescent Mental and Physical Health

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Experiencing victimization early in life can set the stage for poor mental and physical health. Victimization in the forms of sexual abuse and intimate partner violence are particularly harmful because they both warrant a myriad of possible physical health outcomes for similar reasons. Victimization during adolescence is notable because this is a key developmental period, thereby increasing the likelihood of negative outcomes. Therefore, this research will focus on the association of victimization on adolescent mental and physical health indicators. We expected these correlations would be stronger among females.

Methods: The sample consisted of 452 European high school adolescents (49% female), ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in the northwest of Italy and in the northeast of Holland. The participants were representative of the population of adolescents attending high school in these regions. Correlation analyses were used between the following variables: victimization, self-esteem, self-confidence, sense of alienation, depressive feelings and physical health status. We used an adaptation of Jessor’s Problem Behavior Theory Health questionnaire.

Results: Among males, victimization was negatively associated to self-esteem (r=.15, p< .05), self-confidence (r= -.16, p< .05), and positively associated to alienation (r= .17, p< .05). Among females, victimization was negatively associated to self-esteem (r= -.32, p< .05), self-confidence (r= -.24, p< .05), health status (r= -.13, p<.05) and positively associated to alienation (r= .23, p< .05) and depressive feelings (r= -.17, p< .05).

Conclusions: These finding reflect a stronger correlation between victimization and poor mental and physical health among females, as hypothesized. In males, however, victimization was not correlated to depressive feelings or health status. Further investigation is needed to determine potential reasons why the effects of victimization were different between genders.
Student Research Day 2015 - Abstracts

**Toumik Asatoorian, English**

Snapshots

Faculty Mentor: Nancy Armstrong, English/Anthropology

When I wrote the piece titled Snapshots, my aim was to capture my brother's experiences living with type 1 diabetes. Nancy Armstrong of the English Department had contacted me to help facilitate a series of Disability Awareness events she was organizing. Part of this involvement was contributing a creative writing piece that reflected the direction Disability Studies was heading. I was equally parts terrified and excited because I knew nothing about the Disability community, the recent scholarship, or even the accepted topics to discuss. I wanted to show how courageous my brother is in his fight against diabetes. I wanted to show the world how inspirational his struggle has been. I wanted to show the able-bodied community that my brother, who was faced with such challenges at such a young age, could nevertheless get to the position he is at life. This was what I wanted to do, but it was not what I did. The facilitation of this event and the writing of Snapshots was in many ways my metamorphosis from someone who saw the Disability community as a source of inspiration and pity to someone who now sees them as any other community of people. The work morphed from a simple non-fiction essay on the struggles of diabetes to a dually authored creative narrative chronicling the lives of two vastly different individuals living with type 1 diabetes, reimagined by close family members. I hope to show how the facilitation of the Disability Awareness event has impacted not only the writing and evolution of my piece but also my view and understanding of the Disability community.

**Eric Avelar, Jeannette Castro, Maggie Meneses, Rosa Montoya, and Alejandra Rodriguez, Psychology**

Persuasion and self-awareness on pro-social behavior

Faculty Mentor: Heather Butler, Psychology

This research project was conducted in an attempt to find out if there is a significant relationship between the elaboration likelihood model of persuasion and self-awareness in regards to eliciting a prosocial response. A total of 100 participants were presented one of four conditions, they were either primed or not primed with self-awareness and received an informational flyer with either the presence or no presence of a peripheral cue. The participants were then asked a series of follow up questions regarding their likeliness to behave in a prosocial manner. The results were then analyzed using a 2x2 between subjects factorial ANOVA. Although the results did not support the initial hypotheses, the researchers do provide solutions and advised improvements that can be put in place for future research on the topic.

California State University, Dominguez Hills
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**Linda Avila, Art & Design**

**Paws for a Cause: Victims of Domestic Violence and their Pets**

Faculty Mentor: Michelle Burry, Art & Design

Paws for a Cause is a group composed of three Design students Janet Avila, Sasha Chhuon, and Jacqueline Ford that is collaborating with a non-profit organization based in Sacramento known as Red Rover Relief to create a fundraising campaign through the use of design. Discussed will be how design concepts can be used to provide much needed funds for grants and shelters for victims of domestic violence escaping with their pets in search of a safer place to call home. We have been in contact Red Rover Relief coordinator concerning the needs of our cause and how we can improve our methods of fundraising through design for a cause.

Our design fundraising methods to date have consisted of online fundraising sites (Gofundme.com and PetCaring.com), social media presence for advertising (Facebook, Twitter and Instagram), word of mouth, and two planned events to be taking place on campus and in a local animal shelter where our ad campaigns, infographics, logo and uniforms will be displayed as we sell our deliverables of hand-made ceramic bowls filled with cookies in order to help raise extra funds for Red Rover Relief. The process of the entire project including the making and selling of our deliverables will be explored as the main focus of our topic. Our brand identity design options consist of a teal and purple color palette, since purple stands as the official color for domestic violence awareness. Teal was added to contrast with the purple. Our logotype is composed of a heart shape made up of human handprints and paw prints of various sizes and in alternating teal and purple colors. The fonts we selected for our brand identity include Gadugi Bold and District Pro Thin. Our design ideas address the major social issues of domestic violence that affects people and their pets.

**Cynthia Ayala-Munoz and Thomas Foley, Psychology**

**Relationship between Exercise, Income, and Behavioral Regulation in Older Adults**

Faculty Mentor: Karen Wilson, Psychology

Exercise often requires money. Gym memberships range from $30 (24 hour fitness) to $120 (Crossfit affiliates) per month (Wolfram Alpha, 2014). Low-income individuals suffer disproportionately from health problems related to physical inactivity, and people from households with incomes below $15,000 are much more likely to be diagnosed with diabetes or obesity and are at greater risk for health problems. The present study hypothesized that exercise, income, and self-regulation are positively correlated in older adults. This information can be used to help confirm the existence of exercise barriers related to low income in older adults. This preliminary study examined general health outcome variables in a convenience sample (N=10) of adults (50 years of age or older). Variables investigated include average exercise, income ratio and behavioral regulation index. For average exercise, participants reported an average of 344 minutes in the two weeks before the study (SD = 293.56 minutes). Income was self-reported (M = $23,988, SD = $18,813). Behavioral regulation was measured using the Behavior Rating Inventory of Executive Functioning (BRIEF) subscale (BRI). BRI score represents the Inhibitory Self-Control index (M = 54.1, SD = 9.6). Two men and eight women participated in the study; the mean age was 68.5 (SD = 11.82) years with a range of 50 – 86 years. Preliminary analysis indicated a significant positive correlation between exercise and income, r = .846, p < .005. Average exercise and behavioral self regulation had a non-significant weak correlation (r = .085, p = .41). Behavioral regulation and income were also positively correlated (r = .379, p = .140). Interestingly when income was controlled, behavioral regulation and average minutes of exercise were negatively correlated (r = -.478, p = .097). Therefore, the initial hypothesis is partially supported due to the strong correlation between average minutes of exercise and behavioral self-regulation; however, BRI was not associated with exercise in older adults.

California State University, Dominguez Hills
Aleksander Babic, NCRP

The impact of Brain Circulation Phenomenon, as the contemporary system of migration, in potential International Conflicts

Faculty Mentor: Nancy Erbe, NCRP

Third world countries’ human capital and exceptional talents fleeing their homelands searching for better living standards remain filed under the term brain drain, which has been modified with more positive aspects of brain circulation. In the brain circulation, brain gain is the opposite process from brain drain, particularly applicable with regard to the intellectual diaspora. For the purposes of this research study, intellectual diaspora means knowledge movement away from the country in which the migrated students were educated. Since it is hard to trace the whereabouts of the knowledge looking at the final product, this sort of capital became liquid in the globalization era, similar to the phenomena of corporate hunts for cheap labor or money hideaways in offshore tax havens. This intellectual potential is a valuable manufactured commodity of trade and is high demand commerce. Is the lump sum tuition money paid by a student from another country a short term gain for the domestic prestigious alma maters and brain circulation (exiting the country after getting one’s education) a nationwide loss in the long run?

Accordingly, Godwin Okeke (2007), while analyzing African countries’ development, implies that brain gain presents the possible option for conflict resolution in the global transfer of knowledge. On the other hand, Rosalie Tung (2008) introduces the role of ethnic migrations and the rise of international competition by gaining from the intellectual capital migration. Amid increased international rivalry in the chase for bigger productivity rates, there is an obvious conflict of interest in global settings particularly in bilateral relations. How does brain gain affect the world economy and increase the likelihood of International Conflict?

Whitney Baird, Bethany Grigsby, and Eric Carlson, Occupational Therapy

Transgender Identity and the Experience of Transition: A Phenomenological Study

Faculty Mentor: Claudia Peyton, Occupational Therapy

Within occupational therapy and science literature, studies have addressed transgender health, wellbeing, and occupational engagement. However, research has yet to focus on the transition process, particularly exploring those occupations and roles unique to the experience of adjusting one’s presentation to match gender identity. To gain greater insight into this phenomenon, this qualitative study explores the experience of transition for transgender persons. Semi-structured interviews and observations were transcribed and analyzed using a phenomenological approach. Six transgender participants who have experienced, or are currently experiencing, a transition in gender presentation were selected. Using phenomenological analysis, three central characteristics of the transition experience emerged. 1. Transition is a reconsideration of the gender binary. 2. Transition is characterized by inherent risk. 3. Transition is necessary to enable the expression of an authentic identity. The findings of this study have important implications for incorporating occupational justice into practice. As holistic healthcare providers, occupational therapists should educate themselves in order to provide client centered care that recognizes and affirms each individual’s gender identity. Through analysis of environmental factors, such as social participation and occupational barriers, informed therapists can serve as valuable assets in navigating the transition process.
Student Research Day 2015- Abstracts

Glaiza Barrios, Health Sciences

Mapping the relationship of adults with low colorectal cancer screening in relation to low socioeconomic status in South Bay Los Angeles

Faculty Mentor: Enrique Ortega, Health Sciences

Background: A number of studies has shown that a low rates of colorectal cancer screening is often associated with low socioeconomic status and low education. This study used geographic information system (GIS) mapping to geographically identify colorectal cancer screening among adults ages 50-65 years in south bay of Los Angeles county.

Methods: We used geographic information systems (GIS) tools to the investigation of colorectal cancer screening. Geographical Information System (GIS), is a software used to layer spatial data so that maps of a specific areas may be created. Colorectal screening was collected from 2005 Los Angeles Health Surveys administered by LA county of Public Health. The spatial breakup of the data is separated by Health Districts with a sample of an estimated participants of 1,531,000 of which all races. This data was used to identify of how many adults screened for colorectal cancer in Los Angeles County.

Results: Results indicated that more than half of eligible adults were getting colorectal screening in South Bay Area (67%). The maps were able to identify colorectal screening rates by LA County health districts. In South Bay health districts only few cities are getting screened such as Harbor, Torrance, Long Beach and Inglewood. We also found that Foothill, Inglewood, East LA, and Northeast has the highest prevalence of colorectal screening.

Conclusions: The GIS efforts can help providers understand and identify who were getting colorectal screening or not. GIS also facilitated our understanding and distribution of South Bay population. Healthcare agencies can create an intervention to do colorectal screening among adults ages 50-65 in South Bay. By addressing this early through screening we can reduce colorectal cancer among adults.
Phoenicia Benjamin, Business Administration

Bio Poem

Faculty Mentor: Gary Polk, Business Administration

The main objective of the Bio Poem was to research an effective leader or manager and create a short poem explaining who our leader is. We were assigned to research our manager’s background information. For example, where they were born, their family origin, and if they were a college graduate. We were also responsible for researching our manager’s managerial style, failures, and what they would be remembered for. My professor stressed the importance of finding out what our leader’s failures were, in order to understand how they were able to recover from their failures.

The person I chose to research was Howard Schultz, a man who came from a working poor class family and built a successful company. A man full of ambition to fight for his vision of becoming a successful leader no matter who told him he wouldn’t become one. When Howard first started off times were difficult for him because he couldn’t find people to invest in his idea. There were a few who believed in him but he always needed more supporters until he was able to set a name for himself. Howard grew to become a democratic manager, one who encouraged his employees to share their ideas. His best managerial skill was interpersonal, which isn’t a surprise being that he was a communications major. He failed as a manager when he stepped down as a CEO because having another person run his company quickly lead to a disaster. He has taught that no matter who tells you that your idea will never be successful you have to believe in yourself.

Jonathan Bentley, Psychology

Impacts of 3D Movies

Faculty Mentor: Mark Carrier, Psychology

This study looks at the effects of 3D technology on memory. 3D movies are becoming a huge enterprise, therefore it is important to know how these movies will affect the people. The research literature has shown how 3D movies cause various effects for better or worse. This study is examining whether 3D or non 3D movies have a greater positive effect on memory. In short this study is examining which type of movies is more memorable. This study uses a between groups design, where one group of participants will watch 3D movies, and the other group will be watching non-3D versions of the same movies. Students from California State Dominguez Hills are the main population of interest for this study. The participants from either group are instructed to take a movie survey questionnaire with them to the movie they go to see. These questionnaires assess how much the participants retained the information from the movie. The factors that are being assessed in this study are presence, immersion, discomfort, and memory. So far, the literature has shown that 3D movies are less memorable than non-3D movies. This work strengthens the already existing literature.
Student Research Day 2015- Abstracts

Shelley Berger, Melody Chung, Jennifer Erickson, and Liz Allison, Occupational Therapy

The Shared Experiences of Informal Caregivers of Adults With Acquired Brain Injury

Faculty Mentor: Claudia Peyton, Occupational Therapy

There is a lack of information in regards to the experiences of individuals caring for loved ones with acquired brain injury (ABI). A review of the literature indicates that brain injury is a significant concern due to its extensive recovery process and effect on the family system. Research reveals that supports need to be provided to both the caregiver and the ABI clients. A transcendental phenomenological qualitative study was used to describe and interpret the experiences of informal caregivers of a loved one with an ABI. Seven adult caregivers, California residents, participated in this study. Participants’ significant statements on the recovery process point to the importance of a wide variety of support systems to help at all stages of recovery, which shed light on what helped or hindered overall caregiver feelings of happiness and satisfaction with their lives. Participants shared the importance of maintaining close relationships with friends and family, as well as how important on-going brain injury rehabilitation and formal caregiver assistance had been. Participants experienced feelings of emotional distress, isolation, and overall anxiety, which was mitigated by availability of supports. A majority of participants felt dissatisfied with availability of resources such as insurance coverage, disability, support groups, and on-going care and brain injury education.

Kayla Berns, Alexa Colburn, and Leila Deschuytter, Occupational Therapy

Exploring Reasons for Continuing Participation in Creative Arts: A Narrative Study

Faculty Mentor: Claudia Peyton, Occupational Therapy

Creative and arts-based activities are historically and fundamentally tied to the field of occupational therapy. At the birth of the profession, arts and crafts were used in a therapeutic way to help patients find purpose and meaning in their lives. As paradigms shifted and a medically-based model prevailed, creative arts became a less significant aspect of the profession’s practice. However, recent occupational therapy literature has found positive effects associated with creative arts participation, primarily related to psychological and social-emotional well-being. Yet there is little information about why creative art occupations are initially taken up or why individuals remain active participants over time. The purpose of this narrative study was to explore participants’ reasons for their continued involvement in creative arts occupations. A narrative analysis research method was used to illustrate the individuals’ lived experiences over time and the evolving meaning that participation holds for them. Participants were recruited using snowball technique through known-key informants, and semi-structured interviews were conducted with six adults. Interviews were organized chronologically and narratives were analyzed along a three dimensional matrix model, considering personal and social interaction, across time and place. Themes across participants were most strongly seen along the dimensions of personal interaction, social interaction and time.

Themes within initial and past participation were related to self-exploration and social supports. Themes in present and ongoing participation included views of art occupations as therapeutic, an intrinsic part of oneself and a vehicle for social connection. These results expand upon existing literature to look at the meaning of, and motivation for, individuals’ creative pursuits. Results indicate the considerable impact that art-based occupations can hold for individuals’ well-being, particularly in mental, social and emotional domains, and illustrates the therapeutic potential of incorporating arts into occupational therapy practice.
Student Research Day 2015- Abstracts

David Bobadilla, Miguel Huizar, DMA

“Selfies While Driving”

Faculty Mentor: George Vinovich, DMA

The objective of this television public service announcement is to increase awareness of the danger of taking selfies while driving. Co-producers, David Bobadilla and Miguel Huizar, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-walla, and recording original music) with the goal of warning young drivers about the dangers of taking selfies while driving.

Livia Bongiovanni, English

Deus in Absentia: The Omission of God in Dryden’s State of Innocence

Faculty Mentor: Helen Oesterheld, English

Previous writers have remarked on the relationship between Milton and Dryden, but few have made a close examination of their shared work: Paradise Lost and The State of Innocence. While Dryden’s opera lacks some of the beauty and subtlety of Milton’s language, his adaptation of Paradise Lost emphasizes certain aspects of Milton’s epic while minimizing or entirely omitting others, the most obvious of these being a depiction of God. Not only does Dryden’s adaptation of Paradise Lost reflect his Catholic and Royalist principles, his omission of God places the emphasis on the physical world rather than the spiritual. A close reading of Dryden’s work reveals that, by removing some of the more spiritual aspects of the play, Dryden reasserts a more metaphysical relationship with God and shifts the story’s focus to the more human experience of Adam and Eve.

Dryden’s opera is a Restoration drama in every sense of the word, seeking to reframe not only Milton’s political views but his religious ones as well. By revealing the will of heaven solely through the use of intermediaries, Dryden restores Milton’s Paradise to the proper theological order, with special attention paid to the Catholic preoccupation for hierarchy and ritual. The rhetoric that Dryden imagines between Raphael and Adam creates a sense of distance evocative of the kind of courtly reverence reserved for the monarch. Despite the success of Dryden’s reframing, the absence of the deity leaves the reader with a distinct lack of spiritual guidance, which forces the reader to turn instead to the human drama of Adam and Eve. Dryden dwells on the scenes of Paradise not because they are more important than the scenes of Heaven, but because it is only through the human experience that we can begin to understand God.
Student Research Day 2015- Abstracts

Daniel Borbon, Business Administration

Steve Jobs: Bio-Poem

Faculty Mentor: Gary Polk, CBAPP, Management and Marketing

The intent of this research is to inform the community about one of the greatest leaders of the era. Steve Jobs was one of the most influential and inspirational characters in the world. Steve’s vision, innovation and creativity, revolutionized the industry of computers, music and animation. Steve wasn’t the friendliest person to be around, but he used to make you respect you by his vision and motivation to “leave a dent in the world”. The purpose to inform the Dominguez Hills community is to inspire them and motivate them to think outside the box and to never give up your dreams and visions. Just like Steve, driven by his vision, I want to motivate students to not give up and stand for what they believe on. I learned from Steve that if you surround yourself with the adequate people that have the same goal and motivation as you, you can attain the impossible.

Shalana Bradford, Communications

Instagram: seeking self-acceptance through selfies

Faculty Mentor: Nancy Cheever, Communications

In recent years, social networking sites (SNS) have become a worldwide trend. This study explores previous literature on Uses and Gratification theory in relation to social media use. Social media users utilize sites such as Instagram to gain attention from their peers to satisfy needs of acceptance. Uses and Gratification theory (U&G) explains how users gratify their need for social acceptance by creating frequent post on Instagram. Research conducted by Sundar and Limperos (2013) explains the way new media emerges to satisfy preexisting needs. Feaster (2013) explains the way media afforded information control allows users to gain a stronger sense of acceptance from their peers. Maslow’s hierarchy of needs (1968) explains the fundamentals of human needs while, U&G describes how those needs are satisfied. The research method used in this study was survey research. Participants were selected using purposive nonprobability sampling. The population was social media users over the age of 18. The sample size consisted of 466 respondents. The results of this study found that social network users are able to gratify their needs of acceptance from their peers through habitual use of SNS. Based on the findings of this research further studies can be conducted to find out if male SNS users seek to gratify the same needs as female users.
Instability of a Kingdom Reflected in Adultery

Knights in Arthurian literature are guided by Christian virtue and chivalry, two typically conflicting codes. A knight’s affair with his lord’s wife, however, is a transgression of both Christian values and the knight’s code. Thus, the affair between Tristran and Yseut in Béroul’s The Romance of Tristran, should be condemned as treason at the very least. Yet, the speaker throughout the narrative victimizes the adulterous couple as a pair of slighted nobles at the mercy of despicable, albeit honest, barons. The purpose of this paper is to deconstruct the underlying reasons for the text’s acceptance of adultery, a mortal sin and an act of treason, for which neither Tristran nor Yseut is ever punished. This paper will argue that Béroul’s subversion of conventional ideas about sin is meant to reflect the instability of Mark’s rule. Throughout the narrative, Béroul elevates the nobility of Tristran and Yseut through clothing and selfless deeds, but ignores the gravity of their betrayal. Béroul’s tragic characterization of the adulterous couple is tragic enough to illicit the audience’s sympathy. Critics generally agree that the speaker is complicit in the Tristran and Yseut’s affair and that Yseut’s mastery of language exonerates the lovers of all crimes. However, more research needs to be done on the underlying cause of their transgression. As nobles their betrayal is merely a symptom of a greater crisis in the kingdom: King Mark. Mark’s failures as a leader create a power vacuum that allows even the most “lowly” figures—the lepers—to take advantage of the queen and, to an extent, the kingdom. Therefore, Béroul’s speaker’s acceptance of the affair is meant to emphasize the bigger threat to Mark’s kingdom: its inept king.

The Deaf and Access to Healthcare: A Review and Assessment

Despite efforts aimed at ensuring equal access to healthcare for vulnerable populations in American society, the deaf are still an under-served group. Although the importance of ensuring equal access to healthcare for the deaf is well discussed in the literature, no comprehensive theoretical or empirical studies exist on the environmental factors that prevent the deaf from having equal access to healthcare. This paper will review and assess the research on the factors that affect equal access to healthcare for the deaf published in American journals in 2000-2014. The purpose is to develop a theory on why the deaf continue to have unequal access to healthcare in American society.
Charlene Bwrede, Physics

A Computational Study of Phonons in Nanocrystalline CdSe.

Faculty Mentor: John Price, Physics

The purpose of this study is to carry out computational simulations of the phonons (elastic arrangements of atoms or molecules) in core-shell semiconductor nanocrystals CdSe/CdS. These simulations will provide insight into the actual atomic motion involved in the phonons. In order to find out how the atoms in these nanocrystals move, we first need to find out how they interact with each other by developing a force field (set of equations that calculate structural and mechanical properties of a crystal). We used the Stillinger-Weber type force field for InAs published by Han and Bester [Phys. Rev. B 83, 174304 (2011)] as a starting point and refined its parameters to reproduce the phonons and other structural and mechanical properties of bulk CdSe and CdS crystals. Using the General Utility Lattice Program (GULP) and two Fortran programs written by Anne Kelley, we calculate the equilibrium structures, phonon frequencies and modes, and electron-phonon coupling strengths of spherical nanocrystals with CdSe cores and CdS shells. This information is used to help interpret the Raman spectra of these materials. These semiconductor nanocrystals are important because they can potentially be used for the conversion of light into energy (solar power), energy into light (LED), and light of one color into light of another color (cellular imaging).

Liliana Cabrera, Sociology

Dysfunctional Families and how they affect our communities and classrooms

Faculty Mentor: John Hsiao, English

The purpose of my project is to research dysfunctional families, focusing on absent fathers and how that has both a positive and negative effect on the child involved. Dysfunction in families is the root to delinquent and foolish behavior that occurs in our communities. The most common dysfunction found in families is the absence of a parental figure, usually the father. This scenario typically has a negative effect on a child, especially if the parental figure that is absent is of the same sex as the child. It does the child a huge disservice because when that parent is absent the child does not get an example to follow. I grew up in a community where the majority of my peers came from a dysfunctional situation. When a household is not operating normally it affects the child. 85% of children that exhibit behavioral disorders come from fatherless homes. The chances a young male will engage in criminal activity doubles if he is raised without a father. These statistics show that this issue will always be present and have an effect on our youth and since I plan on working with the youth in the future this issue is something that I need to be enlightened. Through this research I plan to show the causes and effects that dysfunctional homes have on children with a focus on showing how it affects our communities and learning environments, once I achieve that I plan to take that knowledge and connect it to my field of study: Sociology.
The effect of Facebook “likes” and Instagram “likes” on Self-Esteem

Social media is part of everyday life and Social Networking Sites (SNS) like Facebook (FB) and Instagram (IG) grow in popularity every day. This study investigated whether there is a causal relationship between the number of FB and IG “likes” received on a photo update and self-esteem. It also investigated whether the effect of the FB and IG symbols are the same, a heart on IG and thumbs up on FB. There is evidence that supports the notion that exposure to FB can increase self-esteem. (Toma, 2013). The sample consisted of (n=79) students. In an experimental procedure the participants were either assigned to view a mock FB or IG profile with a recent photo update that contained 13 “likes” or 103 “likes”. Participants individually completed a pretest and posttest measure of self-esteem, the Rosenberg’s Self-Esteem Scale (Rosenberg, 1965). It was expected that a high number of FB or IG “likes” will increase the participant’s self-esteem. It was also expected that the shape of the “like” on IG (heart shape) will increase self-esteem more than the “like” on FB (thumbs up). There was not a statistically significance difference in self-esteem, based on the number of “likes”. There was not a statistically significance difference in self-esteem based on the shape of the “likes”. Both hypothesis were not supported, one of the reasons why is because of testing effect in the measures. Participants remember the same answers from pre – test to post test. Also, the mock profiles were not realistic enough for it to have an effect on participant’s self-esteem. Future studies should use different measures and have participants log in to their own accounts to make it more realistic for them.

An Inspiration of Motivation, Berry Gordy

Can successful people also have failures? This research is about providing background on Berry Gordy and his managerial skills. His efforts towards building Motown Records contributed into not only great music across the globe but the maturity of his artists of presentation and deliverance. First, I give the background on Berry Gordy and how he became motivated into creating his own record company. The research deals with how he maintained a family oriented company but managed his artists as well. Berry Gordy inspired artists and achieved success until Motown’s downfall in which artists left and eventually would sell his company. The research gives an idea on how to be a leader and resurrect from your failures.
Student Research Day 2015 - Abstracts

Juan Cardenas, Hector Carranza, Physics

Preparation for the Study of Λ Rescattering on the Proton

Faculty Mentor: John Price, Physics

A complete study of the structure of the proton requires knowledge of its interaction with other particles. One such particle is the Λ, which is similar in structure to the proton, but with a different quark content. Studying the interaction of the Λ with the proton is difficult, since the Λ does not exist naturally, and decays rapidly when produced in the laboratory. The CLAS collaboration at the Thomas Jefferson National Accelerator Facility is able to produce large numbers of Λ's via the photo production process. By using a long hydrogen target, the Λ produced in this reaction can sometimes interact with a second proton in the target. The simplest process between a Λ and a proton is the elastic scattering process Λp → Λp. The proton, the decay products of the Λ, and the K+ from the original Λ production. Since the main decay mode of the Λ is to π-p, the complete final state for this process is K+π-pp, which is an apparent violation of baryon number conservation. The first step in this study is the identification of events that have two protons and a K+. This talk will discuss the physics motivation behind this work, and will present the current status of the analysis of Λ photo production in events with two protons.

Gerardo Careaga Jr., Social Work

Exploring Social Justice Through Music

Faculty Mentor: Makeda Graham, Social Work

Music has been a crucial component in social movements in the past, however, it is not commonly used in today’s social justice issues. I’ve addressed a few reasons why social workers have moved away from utilizing music in the social justice arena. Also, this study addresses the relationship and benefits between music and social movements through areas of collective identity, free space, emotions and social movements culture. Music has been an influence in social movements in that Collective identity grows and develops within free spaces through the use of music. Free spaces are key locations where people’s emotions can be instrumental in the evolution on collective identity. A social movement culture may develop as the social movement unfolds and music serves as a significant mechanism for solidarity when social movement advocate’s move beyond free spaces and move to a more upscale social movement. Participants are motivated to maneuver to small-scale social movements to more prominent issues. The argument that is conveyed in this document is that research on music in social movements can be enhanced to assist social justice advocates on addressing social justice issues.

California State University, Dominguez Hills
Student Research Day 2015- Abstracts

Claudio Carini, Martha Ramos, Michelle Garcia, and Brandon Gay, Anthropology

Integrated Geophysical Surveys at Archaic and Formative Archaeological Sites in Tumbes, Peru

Faculty Mentor: Jerry Moore, Anthropology

In this poster, we interpret data collected through nondestructive geophysical methods at the prehistoric sites of Santa Rosa and El Porvenir in the northern region of Tumbes, Peru. In late May and early June 2014, a program of integrated geophysical survey incorporating magnetometer and ground penetrating radar sought to identify subsurface archaeological features at the two sites. Previous excavations at these sites provided material data dating from 4750 BC and revealed architectural shifts and changes in settlement patterns in the Archaic and Formative periods. Geophysical mapping at Santa Rosa displays subsurface geological features and possibly, previously unknown anthropogenic features such as a circular structure similar to one found during excavations in 2007. El Porvenir, excavated in 2006, revealed an elliptical structure with a clay floor and hearth. Integrated survey at this site attempts to define features such as shell deposits, hearths, and floors. This integrated geophysical survey will aid future excavations at these prehistoric sites, furthering understanding of regional cultural variations during the Archaic and Formative periods in far northern Peru.

Nancy Carrada, Psychology

Health Related Quality Of Life among Spanish- and English-Speaking Latinas

Faculty Mentor: Erin Merz, Psychology

Health-Related Quality Of Life (HRQOL) provides an indication of general health and well-being. Previous research has suggested that Latinas report lower (HRQOL) than non-Latina White women. Among Latinas, higher acculturation has been related to better HRQOL. Language preference is one indicator of acculturative status, and could be an important factor in understanding who is at risk for poorer HRQOL. The current study describes the characteristics of a large community-based sample of Spanish and English-speaking Latinas and explores differences in HRQOL across language. It was hypothesized that English-speaking Latinas will report better HRQOL. As part of a larger trial evaluating the efficacy of a clinical trial education program, 281 Latina women answered self-report surveys in their language of preference (Spanish n = 141; English n = 140). Demographic characteristics and the first item from the BRFSS Healthy Days Core Module (Would you say that in general your health is excellent, very good, good, fair, or poor?) were used in the current analyses. The majority of the sample self-identified as Mexican or Mexican American, and the average age was 40.21 (SD = 13.04). The majority of women had an income of less than $20,000 per year and approximately half had a high school education or less. There was a small but significant main effect for language, F (1, 279) = 19.78, p < .0001, (partial η 2 = .066). English-speaking Latinas reported slightly better HRQOL (M = 2.67, SD = .99) than Spanish-speaking Latinas (M = 3.20, SD = .99). Although language preference may provide some indication of who is at a higher risk for reduced HRQOL, it is possible that other factors such as income and education are driving this relationship. Additional research is needed to understand the mediators that may clarify the relationship between language/acculturation and HRQOL.
Student Research Day 2015- Abstracts

Rebecca Carter, Health Sciences

Adolescent Deviant Behaviors and Depression in Relation to Risky Sexual Activity

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Health Science research suggests that adolescents that exhibit deviant behaviors and depression may have an association with increased risky sexual behaviors. This study investigated how deviant behaviors and depression correlated with two risky sexual behavior indicators. We hypothesized that greater indications of deviance and depression would correlate positively with riskier sexual behaviors and that these correlations would be stronger among males.

Methods: The sample consisted of 452 European high school adolescents, ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in Italy and in Holland. The participants were representative of the population of adolescents attending high school. Correlation analyses were used between the following variables: number of sexual partners, promiscuity, depression, alcohol, drug, and marijuana use, lying and disobedience, and poor eating behaviors. Analyses were conducted separately by gender.

Results: Results among males indicated number of sexual partners to be positively correlated to alcohol use \( r = .13, p<.05 \) and negatively correlated to lying and disobedience \( r = -.16, p<.05 \) poor eating habits \( r = -.19, p<.05 \). Promiscuity was found to be positively correlated to all drug use \( r = .16, p<.05 \) marijuana use \( r = .22, p<.01 \) and lying and disobedience \( r = .21, p<.01 \). Among females, number of sexual partners was negatively correlated with drug use \( r = -.15, p<.05 \) marijuana use \( r = .22, p<.01 \) and lying and disobedience \( r = .16, p<.01 \) and poor eating habits \( r = -.24, p<.001 \). Promiscuity was positively correlated with alcohol use \( r = .23, p<.01 \), drug use \( r = .30, p<.05 \) marijuana use \( r = .29, p<.01 \) and lying and disobedience \( r = .18, p<.01 \).

Conclusions: Findings indicated that males were more susceptible to an association on their sexual behaviors when deviant behaviors were present, while females showed a decrease in number of sexual partners, but an increase in promiscuity. More research is needed to confirm the external validity results among adolescents across different demographics.
Delmi Castaneda, Wendy Garcia, Sociology

Youth Impacting Social Change

Faculty Mentor: Roseanne Macias, Sociology

The purpose of this research is to examine how youth organizing has an impact on developmental outcomes for youth and potential to impact social change. The target population for this study is low-income and immigrant Latino youth. The population samples were once members of an organization called Youth United. Youth United is a group coalition made up of youth activists who promote social justice in their community. A qualitative study was conducted using an ethnographic approach to collect data from members of this organization. Various interviews were conducted with some of the youth members by the researcher. Additionally, interviews were semi-structured. The purpose of the interviews was to learn about the participants’ experiences in Youth United and their experiences with youth activism and social justice. The data was collected by the professor and the interviews were transcribed, coded, and analyzed by the research assistants. Throughout the research two themes were identified. One of the themes included the motivations for youth to become involved in an organization like Youth United. The second theme was what these youth learned about working in solidarity through the organization. These youth made a commitment to Youth United that has embedded the idea of social justice in their minds. Even as they grew out of the youth group and moved on to their adult lives, many of them were still involved in the struggle for social justice and had an idea of what it meant to have equality.

Brenda Castillo, Health Science

Military Service Members Are More Prone to Develop Arthritis/Gout/Lupus than the General Population

Faculty Mentor: Archana Sharma, Health Sciences

Background: Arthritis is the most common cause of disability among Americans. Arthritis has always been strongly associated with the aging population, but recent studies are finding a relationship between serving in the military and developing arthritis in their lifetime. Development of arthritis has been linked with heavy physical occupational activity. According to Centers for Disease Control and Prevention an estimate of 52.5 million Americans suffer from arthritis.

Objective: The purpose of this study is to examine the incidence of arthritis among US Military Service Members in comparison to the general population. Also, to examine if the demographic and occupational factors are contributing factors that influence the development of arthritis.

Methods: To determine if there is a relationship between serving in the military and developing arthritis/gout/lupus a chi-square test was conducted with a 95% confidence intervals. The sample size of 42935 people participated in a telephone survey questionnaire conducted by the UCLA Center for Health Policy Research. The participants were asked if they have ever served in the U.S. armed forces and if a doctor has ever told them they have arthritis/gout/lupus.

Results: The results indicated that 40% of the people survey serve in the U.S. armed forces and develop arthritis/gout/lupus in their lifetime. Compare to 30% of the people survey develop arthritis/gout/lupus in their lifetime but did not serve in the U.S. armed forces. In conclusion, we found a relationship between serving in the U.S. armed forces and developing arthritis/gout/lupus in their lifetime (P<0.05; Chi-Square = 225, df = 1).
Music has been demonstrated to have several positive effects upon brain activity and engagement levels (Chanda & Levitan, 2013). In relation to people with Autism, music can also serve as a valuable tool in building communication between people with ASD and their peers, as well as with educators (Iseri, Guney, Guvenc, Guvenc, Ceylan, Cirak, Cayci, Bahar & Sener, 2014) (Kim, Wigram & Gold, 2009) (Chanda & Levitan, 2013) (Rickson & McFerran, 2007). Standardized forms of music therapy remain elusive (Lin et al, 2011). The formats used in previous research have been quite varied. For example, Iseri et al (2014) enlisted a band to play live during treatments and provided participants with access to musical instruments. In contrast, Lanovaz et al (2007) chose a pre-recorded musical selection based on its effectiveness in previous research. However, in a startling shift, the researchers removed that selection for one of the two participants when it provided no demonstrable effect, and replaced it with the music from the subject's favorite television show. The personal tastes of the experimenters are visible in these studies, and in other cases there is an obvious lack of standardization. We must reduce the presence of personal biases among experimenters to the greatest extent possible in order to make the music therapy reflect the needs of the subjects and not the preferences of those conducting the studies.

This study will gather and examine the data from interviews, observations and focus groups. The research hypothesis of this project states that presentation, environment and types of music selected will impact the outcome of studies involving music therapy and people with autism. While these factors cannot be perfectly identical across experimental settings, a more standardized form of music therapy will allow for the results of future studies to be more accurately generalized.
Catherine Chamberlin and Rachel Fein, Occupational Therapy

Meaningful Occupations for Adults with Progressive-Types of Multiple Sclerosis

Faculty Mentor: Claudia Peyton, Occupational Therapy

Multiple Sclerosis (MS) affects an estimated 2.5 million people worldwide. In the U.S., approximately 135 in 10,000 people have MS and most are diagnosed between the ages of 20 and 40 years old (Multiple Sclerosis International Federation [MSIF], 2011). Secondary progressive MS (SPMS) is characterized by a development of progressive disability usually prevalent later in the disease with no remission (MSIF, 2011). Most individuals diagnosed with relapsing-remitting Multiple Sclerosis (RRMS), will eventually transition to SPMS, a period where the disease progresses more steadily. Studies indicate that 90% of those diagnosed with RRMS will transition to SPMS within 25 years (National Multiple Sclerosis Society [NMSS], 2014c). Through this qualitative research study, occupational therapists may be able to gain insight into the lived experience of individuals with progressive MS, as current research focuses primarily on the relapsing form of the disease. This qualitative study described the shared meaning of engagement in occupations for five individuals living with progressive types of Multiple Sclerosis (MS). The phenomenological approach allowed researchers to understand variations in the lived experiences of individuals with SPMS. Semi-structured, open-ended interviews were conducted and data was analyzed for common meaning units resulting in a shared essence, using Moustaka’s transcendental phenomenological approach (Creswell, 2013). NVivo software was used to reduce and code data. The results of the study revealed a shared essence of the phenomenon of meaningful occupations for individuals with SPMS; meaning is derived from perceived internal locus of control. A proactive stance was found to indicate an increased sense of autonomy and a higher degree of participation in meaningful activities. Level of impact was not found to be a predictor of quality of life. Regardless of the “disease progression, a sense of control and independence was found to be the key factor in deriving meaning from occupations.

Francisca Chavez, Chicano Studies

Latinas: Trapped in the Cycle of Violence

Faculty Mentor: Marisela Chavez, Chicano Studies

Intimate partner violence has become one of the biggest social problems in the United States. In some populations violence is more prevalent, especially in the Latino community. Latinas, among other women of color, especially those who of lower socioeconomic status are more likely to experience intimate partner violence when compared to non-Latina women in the United States. And, because Latinas are disproportionately underrepresented in the research with much of the data focusing on non-Latina experiences, Latinas continue to face multifaceted challenges that keep Latinas trapped in the cycle of abuse. The purpose of the research is to examine and explore the experiences of Latinas who have been victims of intimate partner violence, and reveal the multifaceted challenges that keep Latinas trapped in the cycle of abuse. The research paper consists of primary and secondary resources. The primary source includes two interviews with Mexican American women. The interview protocol will consist of unstructured open-ended questions. In addition to the primary source, the research will also include secondary sources.
Fanessa Chiappinelli, Malina Hong, Nallely Lopez, Psychology

The Relationship between high efficacy and Long term Support from Parents in Freshmen College Students.

Faculty Mentor: Karen Wilson, Psychology

This experiment will examine the comparison between freshman students who show high efficacy characteristics with long term support from their parents versus students who have little support. It has been demonstrated that students who receive support from home succeed in school. Although it all begins with the parents, improving a children’s behavior at a young age is key to a beneficial education result. Keeping a high communication level such as parents giving advice but placing no judgment opens a door of comfort. It is important that students begin building stronger self-efficacy as early as possible with the help of their parents. There are preliminary studies that are beginning to link high-efficacy and the help of parental support with academic success. These finding suggest that students with a high support system show attributes of high efficacy and those with little support fail to show self-efficacy. It is hypothesized that students show high efficacy characteristic with long term support from their parents.

Vicky Chin, Laura Cole, and Lisa Eisenberg, Occupational Therapy

Animal-Assisted Therapy through the Lens of Occupational Therapy

Faculty Mentor: Claudia Peyton, Occupational Therapy

The purpose of this study was to examine the lived experiences of occupational therapists who use animal-assisted therapy (AAT) in their practice using a qualitative phenomenological approach. Previous to the study, not only was there limited research about AAT in occupational therapy (OT) practice, but also minimal research had been found exploring the perspectives of occupational therapists’ use of AAT with clients. This study asked: How do occupational therapists describe the experience of using AAT during their practice? Six licensed occupational therapists who have used AAT in practice participated in an open-ended, semi-structured, audio-recorded interview, describing their experiences. Data was analyzed using the phenomenological approach. Significant statements were identified; meanings and clusters of meanings were formulated, resulting in a textual description of the phenomenon. Results from this study increase knowledge of AAT use in the field of OT and provide insight into the experience of its practice. The connectedness and progress experienced between clients and the animals, and even the therapists themselves, has contributed to significant job satisfaction on behalf of the therapists.
Student Research Day 2015 - Abstracts

Arron Collins, Computer Tech

The Development of LTE and Cellular Networks

Faculty Mentor:

The reason I want to write my paper on LTE, is because this is currently a service that’s still in development itself and has accomplished things that people use to dream of. These services allow top download speeds and High Def. Call Quality, changing the way we use cell phones today. With every carrier in the world bringing out new devices to meet this requirement for the new services, it is still surpassing its original purpose. The original purpose for this service was to just increase data speed, but now smaller antenna can be used to contact this service, making more room for device sand their enhanced features to be used to its full potential.

Why LTE? Does it really make a difference in speed? That is what most people ask but the answer is simply yes. Now day’s people are becoming so spoiled that they forget that 3G used to be the standard. LTE provides about 10X the speed of 3G, 20x the speed of Wi-Max, while still being developed meaning that there is still many possibilities of it becoming even faster over time. So why not educate people on the development of the future and its history.

My contribution to this project will be opening up cellular devices to see what give them access to cellular networks and how they work. With the equipment they use and antennas attached to the devices, also the plans that are given to customer to allow them to have access to their networks and special features, I will use my job experience, and pass network experience to make this paper to the best of my ability.

Eric Cornista, Computer Technology

Diagnosing Windows, Hardware, and the Operating Systems

Faculty Mentor: Mohsen Beheshti, CTC/CSC

We live in a world were computers are being used every single day of our lives. Whether it is to check your email, making an online payment, playing video games, or just simply surfing the web. You then realize your computer is starting to act dysfunctional and you have don’t have the slightest clue why the computer is acting the way it is. You should be able to trouble shoot and figure out the cause to the issue. To be able to trouble shoot windows 7 or any other operating system you must understand how the hardware works in a computer and as well how software works. Hardware and software both communicate with each other to perform what is called the computer today. Once you know the basic of how hardware and software works you’ll be able to trouble shoot almost any issue a computer may have. After knowing the basic functionality of the hardware/software you’re ready to step forward and take certain steps to figure out the solution to the problem that the computer may have. Also, there are variety of tools to help resolve whatever issue the computer may have and tells you exactly what could be causing the problem.

California State University, Dominguez Hills


**Diana Corral, Don Ly, Danielle Murillo, Precious Nash and Juliana Soto, Sociology**

Examining Differences in Judgmentalism and Sexual Communication between Black and Non-Black individuals.

Faculty Mentor: Matt Mutchler, Sociology

Little is known about the relationship between judgmentalism and sexual health communication among friends, although such communication may influence safer sex behaviors. The literature fails to address these topics within peer relationships, particularly among young gay men and their friends. However, we found that the construct of judgmentalism in previous qualitative research was a common theme in sexual communication. Therefore, we collected quantitative data via self-administered surveys among gay identified CSUDH students regarding their level of sexual communication with their closest friend. This study was approved by the CSUDH IRB. We conducted univariate and bivariate analysis using SPSS. We developed these items to measure judgmentalism: “I sometimes leave out details about my sexual experiences when talking with my friend.”, “My friend sometimes calls me a slut or a whore (even as a joke).”, and “My friend has called me stupid or dumb for having sex without a condom.” Sexual communication was measured using adapted standardized items (extent, quality, comfort, and influence). The sub-sample of young gay students was 48 participants. The race/ethnicity of the participant sample was (36.9%) Hispanic, (33.3%) African American, (15.6%) white, (6.7%) Asian-Pacific Islander, (3.7%) Native American, and (5.4%) other. We found that judgmentalism was related to less communication, a lower quality of communication, and less comfort on many of the sexual health topics we measured (P<.05). Addressing judgmentalism in sexual communication between university students and their friends may improve the extent, comfort, and quality of communication, thereby supporting sexual health behaviors such as safer sex.


**Diana Corral, Don Ly, Danielle Murillo, Precious Nash and Juliana Soto, Sociology**

Sexual communication among individuals in young adulthood compared to middle adulthood

Faculty Mentor: Matthew Mutchler, Sociology

The literature suggests that sexual communication among young versus “less young” university students may vary since young adults are going through a period of “emerging adulthood” in which they face developmental challenges. Common wisdom may suggest that the “less young” are less likely to talk about particular aspects about sexuality than the young since they are exposed to many sources of sexual information via social media and may have grown up in a more open social system regarding sexual norms and values. This is important because studies clearly show that young adults are influenced by their peers when it comes to sexual behaviors. Therefore, we collected quantitative data via self-administered surveys among CSUDH students (N=406) regarding their level of sexual communication with their closest friend. This study was approved by the CSUDH IRB. We conducted univariate and bivariate analyses using SPSS. Sexual communication was measured using adapted standardized items (extent, quality, comfort, and influence). The race/ethnicity of the participant sample was (36.9%) Hispanic, (33.3%) African American, (15.6%) white, (6.7%) Asian-Pacific Islander, (3.7%) Native American, and (5.4%) other. We compared young students (18-21) to less young students (21-69). The extent of sexual communication about STD testing among the young people who have discussed this topic were less than the less young (P<.05). Also, the study showed that the less young were the most uncomfortable talking about the subject of sex with a primary partner with their close friends. Interventions should focus more on young adults and helping them communicate more effectively with their peers since this may lead to norms foster safer sex behaviors.

California State University, Dominguez Hills
Student Research Day 2015- Abstracts

Diana Corral, Son Ly, Danielle Murillo, Precious Nash and Juliana Soto, Sociology

Students’ Experiences in the Sociology Department at California State University, Dominguez Hills

Faculty Mentor: Matthew Mutchler, Sociology

The sociology department at Cal State University Dominguez Hills engaged in a self-study. The self-study, a part of the program review guide established by the university, is a six year process. It is the sixth and final step in the program review cycle, which helps measure the quality and effectiveness of a program. The purpose of the study was to examine life in the sociology department, specifically focusing on students’ overall experiences within the department during their college career. While there are multiple sources of quantitative data regarding the program, very little qualitative data exist especially regarding the experiences of the students themselves. Therefore, we interviewed current students, undergraduates (n=87) and graduates (n=16) regarding their experiences and suggestions for improvement. Most students selected the field because they wanted to help others within their communities, and as such are able to learn about different cultural perspectives, theoretical approaches, and research design. Aside from fostering critical thinking and social responsibility, students develop strong bonds with peers and faculty members, which is essential to social networking. Although this is true, data also suggest that students are in need of better academic advising, a variety of classes offered each semester, and further opportunities for professional development including volunteering, and networking events, thus informing the student of different career opportunities available post graduation.

Marlene Cortes, Daniel Walter Lopez, Psychology

The influence of English as a second language on verbal fluency performance

Faculty Mentor: Tara Victor Psychology

In 2011, 21% of the United States population spoke a language other than English at home (Ryan, 2013). Studies have shown that bilinguals outperform monolinguals on executive function tasks; however, the opposite is true for language tasks. Some have explained the latter by arguing that bilinguals have lower levels of vocabulary than monolinguals by virtue of having to know two languages (Bialystok, et al., 2009; Luo, et al., 2010), and therefore are slower in word retrieval and less easily able to switch from one semantic or phonemic category to another (i.e., “switching” on tasks of verbal fluency; Portocarrero et al., 2007; Troyer, 2000). Additionally, it is believed that bilinguals may take longer to respond secondary to internal conflict over target and non-target language selection, resulting in fewer clusters on tasks of verbal fluency (i.e. generating words within the same semantic or phonemic categories or “clustering”; Bialystok, 2009; Troyer, 2000). However, other studies have revealed no differences in switching and clustering performance between monolinguals and bilinguals (Taler, 2013). Given these conflicting findings, we seek to further explore this question in a neurologically and psychologically healthy, ethnically diverse student population who were administered a comprehensive neuropsychology battery that includes measures of phonemic and semantic verbal fluency. We predict that English as a first language (EFL) speakers will outperform English as a second language (ESL) speakers on verbal fluency tasks (total score). We further predict that the performance of the EFL group will be characterized by more effective use of clustering and switching. Group differences will be examined with respect to age, education, gender and performance on verbal fluency tests. Results will be further discussed in light of the extant literature and directions for future research.
Evangelina Cortez, Art and Design

Art Looting and Plundering During World War II

Faculty Mentor: Kirstin Ellsworth

World War II marks a period that changed the world drastically by events that occurred such as the bombings of cities, the rise and fall of Adolf Hitler, the Holocaust, and many others. However, general documents about World War II do not supply enough information to know what was happening to art during the war. The Monuments, Fine Arts, and Archives Program (MFAA) provided much of the information that is now known about the artworks since the program was solely dedicated to preserving art. Other documents show that Hitler planned to gather worldwide known artworks, as well as lesser-known works done by German artists to be displayed in his museum, which would become the epicenter of art institutions in the world. In addition, most of the artworks that came to be in Hitler’s possession were stolen or traded, but were done in a legal way under the Nero Decree. My research shows that programs such as the MFAA are important because of the information contributed to the art world surrounding the artworks that were stolen, especially since some of the artworks have never been recovered.

Jolene Cun, Sociology

Navajo Native American Ethnic Identity and Cultural Identity

Faculty Mentor: Katy Pinto, Sociology

An individual’s ethnic and cultural identity is important because it defines who a person is. Navajo Native American ethnic and cultural identity is attached in a deep emotional bond with the land base and may explain how some were able to keep their unique identity intact, while others distanced themselves from their Native American identities. Also, Navajos have assimilated to the dominant culture, which in our society, the American culture. This research shows how the Navajo Native Americans defined their ethnic identity and cultural identity. The methods used in this research were indepth interviews of twenty-two participants, both male and female from Shiprock, New Mexico. The interviews consisted of open-ended questions relating to ethnic and culture, such as, traditions, values, ethnicity, assimilation and language. The results showed how each Navajo Native American defined their ethnic identity and cultural identity with the in-depth interviews. This study focused on how Navajo Native Americans currently define their identity and shows how different generations define who they are, ethnically and culturally. This research will also try to find common factors that affect ones identity and this can be beneficial to the Navajo Native Americans as it will allow them to question their ethnic and cultural identity.
La'Shanique Dalcour, Sociology

Los Angeles Community Action Network Evaluation: Housing is a Human Right

Faculty Mentor: Katy Pinto, Sociology

Politicians and the wealthy enforce urban renewal projects, which result in the displacement of poor and working class people. The focus of this project is on the issues of gentrification occurring in the downtown Los Angeles area. Non-profit organizations, such as the Los Angeles Community Action Network (LA CAN) focus on empowering community residents to work collectively in creating an organizing model that eradicates the race and class barriers that are used to prevent communities from building true power against gentrification. This project evaluates LA CAN’s work surrounding housing rights by using fieldwork, participant observations, in-depth qualitative interviews, and document review. This study examines whether LA CAN is able to provide effective outreach for members of the community that are fighting gentrification. This project’s findings show that gentrification is affecting the housing of many community residents in the Los Angeles area. The results conclude that LA CAN’s outreach techniques are effective in educating the community on their housing rights.

Gary Davenport, CBAPP

Al Davis: Just Win Baby

Faculty Mentor: Gary Polk, Management & Marketing

The objective of this project was to research a successful business person and explore their background and management style and more importantly to learn how failure(s) led to their ultimate success. Learning that learning from failure is OK and key to future success. I selected Al Davis, Owner of the Oakland (formerly Los Angeles) Raiders, as the subject of my research. The following research provides an in-depth look into the early life of someone who is broadly considered as the father of the modern day NFL, Al Davis. I researched Davis’ career in pro football from his early days with the AFL to his rise to gridiron supremacy in the NFL during the latter half of the 20th century. Davis was responsible for numerous key contributions to professional football, such as his involvement in the merger of the AFL and NFL in 1969, his innovative coaching tactics that would revive an ailing Oakland Raider franchise, and his revolutionary yet controversial antics as Oakland’s general manager and majority owner for the better part of 42 years until his death in 2011. His failures came in the form of hiring inept coaches in his last 13 years behind the wheel, and his inability to secure a grand venue which would have allowed him to keep the Raiders in Los Angeles. Davis’ accomplishments in the bay area are best summed up by the Raiders winning three Super Bowl championships during his tenure as Owner/General Manager and the installation of the iconic and culturally-defining mindset turned catch phrase “Just Win, Baby!”

California State University, Dominguez Hills
**Student Research Day 2015- Abstracts**

**Anthony Davila, Oscar Moreno, DMA**

“Let’s Move”

Faculty Mentor: George Vinovich, DMA

The objective of this television public service announcement is to increase awareness of the need for children to be active every day and to eat nutritious foods such as fruits and vegetables. Co-producers, Anthony Davila and Oscar Moreno, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-walla, and recording original music) with the goal of encouraging parents to keep their children active and to give them healthy foods such as fruits and vegetables.

**Donte Davis, Sociology**

Prison Music

Faculty Mentor: Jeb Middlebrook, Sociology

The purpose of the research was prison music and to find things that contributed to prison music. What I was focused on was the policies influenced by prison and how songs related to prison culture or criticized policies that influence decisions on incarceration. For example, I found a song by Spice 1 who direct his anger about the Three Strikes Law, and why he thought it was wrong. I also bring up certain statistics of incarceration rates, and how prisoners’ rights as humans are being taken away. The most important part of the research I believe that I found was about how the justice system would rather lock up people instead of using treatment to help people. Another important aspect is the privatization of prisons and how prisons have become a booming business for people.
Robert De Witz, Chris Odudu, Azucena Vera-Ortiz, Psychology

Blues vs. Blessings: Can Gratitude Ward Off Depression in Teens?

Faculty Mentor: Giacomo Bono, Psychology

Over the last two decades evidence has accumulated that gratitude plays an important role in promoting individuals' health, psychological well-being and functioning across multiple life domains. Much of this evidence has addressed adult populations. Only recently has research shown that many of these same benefits appear to occur with youth populations. Importantly, much of this evidence is based on research that has used either correlational methods administered at single time points or that spans relatively short periods of time (i.e., up to six months). The lack of longitudinal studies seriously limits our understanding of the functions of gratitude in youths’ adjustment and wellbeing. The aim of the current study is to provide a longitudinal picture of how and why gratitude relates to depression.

In a large sample of adolescents from suburban areas (N = 436), this study examines the longitudinal association between gratitude and depression over a 4-year period spanning a critical period in individuals’ identity development (range at start of study = 10-14 years, mean age = 11.74 years, SD = .89). Students were asked to complete questionnaires in their classroom at the beginning of the study, six months later, and then again four years later. Gratitude was conceptualized as having a disposition and moods that enable individuals to respond positively to good people and things in their lives. Specifically, the current study will examine gratitude’s association with depression 4 years later as well as any potential mediators using linear multiple regression. Implications for adolescents’ adjustment and well-being will be discussed.

Sophia DeLaTorre, Claudia Aguilar, Oswaldo Carvajal, Tanya Kaplan, and Bray Chadrick, Psychology

Debiasing Perceptions of Forensic Evidence

Faculty Mentor: Heather Butler, Psychology

The misuse of forensic evidence is the second leading cause of wrongful convictions in the United States, and false or misleading expert testimony is the fifth. There is evidence suggesting that jurors see forensic evidence as being reliable, and are not sensitive to variations in the quality of forensic evidence. Previous research found that jurors can be sensitized to the quality of forensic evidence. This experiment sought to replicate and extend these findings by testing the efficacy of two different types of expert testimony using mock jurors. This study sampled ethnically diverse undergraduate college students (N = 130). Participants read about a criminal trial that involved fingerprint evidence. A fingerprint examiner testified that the fingerprint match was an 8-point match (weaker quality evidence) or 16-point match (stronger quality evidence). An expert psychological witness attempted to sensitize mock jurors by testifying that mistakes have been made (errors testimony: present, absent), and that there are not established protocols in fingerprinting (standards testimony: present, absent). Results showed that verdict decisions of those who received the expert testimony about the lack of standards and protocols (standards testimony) did not differ based on whether they received the expert testimony about the errors (errors testimony) that have occurred (M = -1.04, SD = 11.26) or not (M = 3.52, SD = 11.43). The verdict decisions of those who did not receive the expert testimony about the lack of standards and protocols did differ based on whether they received the expert testimony about the errors that have occurred. More specifically, those who received the errors testimony were less likely to vote guilty (M = -23.48, SD = 11.43) than those who did not get the errors testimony (M = 36.96, SD = 12.50). These findings are consistent with previous research investigating this phenomenon.
Student Research Day 2015- Abstracts

Adrian Delgado, Alaina Govender, Maira Salazar, Psychology

The Relationship between Social-Support and Academic Performance in College Freshmen Students

Faculty Mentor: Karen Wilson, Psychology

Previous studies have shown that social support helps to ease life stress as well as predicts overall confidence in one’s ability to cope with stressful life events across several settings (Cobb, 1976). One study showed the positive effects that social support has on first-year college students as they transition into the college setting for the first time (Compas, Slavin, Vannatta, & Wagner 1986). Other research has suggested that the degree of social support, primarily from a student’s parents, predicts the student’s academic success (Assouline, Colangelo, Cole, Cutrona, & Russell, 1994), while another found that schools with higher levels of social support and academic pressure from instructors yielded higher scores in reading and mathematics throughout the school year (Lee & Smith, 1999). Researchers have suggested that social support acts as a buffer for students in times of stress, thus relieving current frustrations in the students, which then allows them to perform better. The present study aims to examine the relationship between social support and grade point averages (GPAs) among a sample of California State University, Dominguez Hills’ students in the first semester of their freshmen year (N=20). Levels of perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) and later correlated with their GPA’s for that semester. It was hypothesized that students who score higher on the MPSS, indicating higher levels of social support, will have higher GPAs. The study consisted of 13 females (65%) and 7 males (35%). The mean age was 18.7 (s.d. = .75) years with a range of 18-20 years.

Daniel Delgado, Yesenia Osuna, Erika Barrera, Psychology

“Freshman College Students: the impact of social support and stress on goal directed behavior during their first year of college”.

Faculty Mentor: Karen Mason Wilson, Psychology

Freshman college students will be entering adulthood where they will be exposed to academic challenges and depending on how they perceive social support, it may either benefit or hinder their academic career. Freshman college students who are experiencing a stressful event and have ineffective coping skills may engage in heavy alcohol consumption, sexual risky behaviors, and they are at risk for dropping out of college. According to Sek (1991) having social support, freshman college students are able to plan and accomplish their goals when going through stressful events. In a study by Robbins, Lese, and Herrick (1993), freshman college students who had goal instability and social support were better able to cope with stress when they felt a sense of belonging and appraised that their relationships provided adequate support. The purpose of this study is to investigate stress and social support in college freshman. Stress will be measured by using the Minority Status Stress (MSS) scale and social support will be measured by using the Multidimensional Scale of Perceived Social Support (MPSS). It is hypothesize that freshman college students who score high on both the Minority Status Stress scale (MSS) and the Multidimensional Scale of Perceived Social Support (MPSS) will be associated with higher scores on goal directed subscale of the Behavior Rating Inventory of Executive Functioning (BRIEF). The preliminary analysis (N=37) indicated a negative correlation with the BRIEF subscale of plan and organization and the MSPSS subscale of significant other (p<.05). However, there is positive correlation with the subscales of the MSPSS (family, friends, and significant other). Findings from this study could help identify factors associated with executive functioning and lead to the development of supportive interventions for incoming college freshmen.
**Student Research Day 2015- Abstracts**

**Robert DeWitz, Ozzy Cravajal, Psychology**

Blues vs. Blessings: Can Gratitude Ward Off Depression in Teens?

Faculty Mentor: Giacomo Bono, Psychology

Over the last two decades evidence has accumulated that gratitude plays an important role in promoting individuals' health, psychological well-being and functioning across multiple life domains. Much of this evidence has addressed adult populations. Only recently has research shown that many of these same benefits appear to occur with youth populations. Importantly, much of this evidence is based on research that has used either correlational methods administered at single time points or that spans relatively short periods of time (i.e., up to six months). The lack of longitudinal studies seriously limits our understanding of the functions of gratitude in youths’ adjustment and wellbeing. The aim of the current study is to provide a longitudinal picture of how and why gratitude relates to depression. In a large sample of adolescents from suburban areas (N = 436), this study examines the longitudinal association between gratitude and depression over a 4-year period spanning a critical period in individuals’ identity development (range at start of study = 10-14 years, mean age = 11.74 years, SD = .89). Students were asked to complete questionnaires in their classroom at the beginning of the study, six months later, and then again four years later. Gratitude was conceptualized as having a disposition and moods that enable individuals to respond positively to good people and things in their lives. Specifically, the current study will examine gratitude’s association with depression 4 years later as well as any potential mediators using linear multiple regression. Implications for adolescents’ adjustment and well-being will be discussed.

**Anthony Diaz, Biology**

The effect on cellular cytotoxicity in MCF-7 breast cancer cells using chlorambucil and chlorambucil tempol

Faculty Mentor: Tilly Wang, Chemistry and Biochemistry

Ionizing radiation and chemotherapy, as a form of breast cancer treatment, are known to have extreme mutagenic effects on patients. This project attempts to understand the cellular response mechanisms of the MCF-7 breast cancer cell line to chemotherapeutic drug agents chlorambucil and chlororamucil-tempol, the primary function is to eradicate cancer cells, by means of reactive oxygen species (ROS) over expression, as an alternative to ionizing radiation (IR) treatment. Research shows that chemotherapeutic drug agents work to impair metastasis of tumor growth in breast cancer cells by inducing high levels of ROS leading to damage to DNA and proteins. Over expression of ROS free radicals in breast cancer cells can have detrimental effects on cellular homeostasis increasing cellular cytotoxicity. ROS are not only cytotoxic but mutagenic. ROS are a common byproduct of the mammalian aerobic respiration system; further, super oxides generated in the mitochondria are responsible for oxidative stress elicited on breast cancer cells. Such super oxides are responsible for tumor formation by eliciting sever damage to nuclear and mitochondrial DNA. Previous works done by this lab primarily focus on induced IR and the cellular mechanisms that give rise to the MCF-7 chemoresistance with respect to antioxidant over expression. Specifically, we looked at the method by which peroxiredoxin II (PrxII) scavenged ROS formation in the presence of IR and how silencing of this antioxidant protein using siRNA can affect the overall cellular survival fraction. Currently, we seek to better understand the mechanism by which the MCF-7 cell line undergoes when subjected to cancer inducing agents such as chlorambucil and chlororamucil-tempol that give rise to the chemoresistant phenotype. In this way, this author wishes to understand the cellular mechanisms free radical inducing drugs have on the MCF-7 cell line and compare them to that of the mutagenic effects IR produce in the same MCF-7 cell line.

*California State University, Dominguez Hills*
**Student Research Day 2015- Abstracts**

**Lauren Dillard, Special Education**

Long-Term English Language Learner Reclassification

Faculty Mentor: Caron Mellblom, Special Education

This study will examine the effects of the Los Angeles Unified School District’s new Long-Term English Language Learner curriculum, English 3D, on English fluency reclassification rates. The study will compare reclassification rates among Long-Term English Language Learners (those who have been enrolled in public schools as English Language Learners for more than five years) between students educated with the new curriculum and those who used the old curriculum. The pre-test scores will consist of ex post facto data from prior school years, and the post-test scores will consist of student scores on the California English Language Development Test. The study will attempt to determine whether or not a new Long-Term English Language Learner curriculum succeeds in boosting the rates of student reclassification as English Fluent Proficient over the course of one or more academic years.

**Lisa Dinh, Chemistry and Biochemistry**

Development of Copper (II) Ion Selective Electrode Membrane Using Luxol Fast Blue

Faculty Mentor: Barbara Belmont, Chemistry and Biochemistry

Low-cost membrane copper (II) ion selective electrodes were made from materials found in a typical undergraduate chemistry laboratory. The poly-vinyl chloride membrane was formed from Luxol Fast Blue dye (sulfonated copper phthalocyanine) and plasticized with triethyl citrate. Prior research found ion selective membranes fabricated with Azo-Violet Copper complex useful and selective for measurement of moderate amounts of copper ion in solution. However, the insolubility of this complex caused no uniform distribution of the ionophore in the membrane, leading to variable response (slope) and low sensitivity (poor detection limit). In an effort to create a physically more uniform selective membrane and possibly a more sensitive electrode, the current research tested the solvent-soluble Luxol Fast Blue for suitability as an ion selective ionophore in the membrane electrode. The Luxol Fast Blue membrane electrode system was characterized by methodically exploring the effects of its construction variables on response, sensitivity, and selectivity. The findings of this research are leading to improvements in classroom laboratory ion selective electrode experiments by offering alternate, affordable, and reliable techniques when resources are scarce.
Ignaly Dircio-Guzman, Claudia Alcaraz, Psychology

Non-Returning Students in Higher Education

Faculty Mentor: Mark Carrier, Psychology

This research is focused on finding solutions that help retain students from dropping out of higher education institutions. The goal for the research project was to figure out why students were deciding not to enroll at Cal State Dominguez Hills after completing a semester. The researchers were intrigued to figure out solutions to decrease the number of students who choose not to enroll the following semester. Trained researchers called the targeted population who chose to not continue their education at Cal State Dominguez Hills after completing a semester. The researchers had a script that they had to follow that asked questions regarding the respondent’s economic situation, academic comfort, skills acquired and personal reasons for leaving. Each individual was asked every single question in the survey through the telephone. The researchers confirmed the identity of the participant by making sure they had attended Cal State Dominguez Hills the previous semester. The researchers believed that financial instability was going to be one of the main reasons students were dropping out of Cal State Dominguez Hills. The researchers expected to find that most of the reasons relating to students not returning to CSUDH were highly related to economic conflicts, and that most students will state that they had financial difficulties continuing their education. Another expected result was that their life responsibilities interfered with their school schedules. Students had work opportunities that enhanced their work life, which interfered with their education. These results could help colleges in constructing various financial workshops for their students to help them apply for scholarships or grants. Helping students be informed of their financial options will help institutions retain students until graduation. The results of this project will help institute better workshops for all CSUDH students.

LaDawn Dixon, Human Services

Faculty Mentor: Kathleen Chai, Nursing

Self-Management of Type 2 Diabetes in the African American Population

Type 2 diabetes is a chronic illness negatively affecting ethnically and culturally diverse populations. Diabetes affects more than 21 million people worldwide with 8.1 million people being undiagnosed. African Americans are twice as likely to contract Type 2 diabetes and are at a higher risk for diabetes related complications and death. African Americans comprise of 12.8% of total Type 2 diabetes cases with the prevalence rate steadily increasing in the United States. Type 2 diabetes is symptomatic of larger issues in the African American population and additional research is necessary to examine what can be done to mitigate the symptomology of Type 2 diabetes. A review of the previous literature has reported on several themes in regards to the appropriate self-management of Type 2 diabetes in the African American community. Interventions that have incorporated cultural tailoring, religiosity, social support, and physical activity have been shown to have significant influence on health behaviors and sustained adherence to lifestyle changes. Further investigation into the effectiveness of these concepts will demonstrate that these are viable determinants of positive diabetes related outcomes. Moreover, highlighting the success of these strategies will lead to the generation of new efforts that can be used to best intervene in the African American community.
Melanie Duarte, James Reed, Health Sciences

Associations of Adolescent Risk Taking with Mental and Social Health

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Severe depression and suicidal thoughts are a major adolescent mental health matter. Recent studies have shown substance abuse to be a defining factor to individuals becoming more inclined to experience severe depression and contemplation of suicide. My research will look at the association between suicidal thoughts, marijuana use, alcohol use and depressive feelings. Recent research shows, that individuals who began smoking marijuana at an earlier age were more likely to experience severe depression as well as attempt to commit suicide as opposed to individuals who began smoking marijuana later in life.

Methods: The sample consisted of 301 Italian adolescents, living in the northwest of Italy and was reasonably balanced for country (52% Italian, 48% Dutch), gender (52% male, 48% female), age (mean age = 17.4 (S.D. = 1.4)). Diverse types of secondary schools participated in the study high educational tracks (25.3%) and schools that focused on technical training (74.7%). Correlation analyses were used between the following variables: suicidal thoughts, depressive feelings, marijuana use, and alcohol use. Analyses were conducted separately by gender.

Results: Results among males indicated greater suicidal thoughts to be associated with greater depressive feelings (r = .25, p<001). Among females greater suicidal thoughts were associated with greater depressive feelings (r = .28, p<001) and lower alcohol use (r = -.20, p<001). Conclusions: The study indicated that there was not an association between marijuana use and depressive feelings or suicidal thoughts. Greater efforts should be conducted to determine the link between substance use and suicide ideation among adolescents.

Faith Duyan, Mercedes Greer, and Desha Higinio, Physics/Psychology

HIPs, the Stairway to Success

Faculty Mentor: Marisela Chavez, Chicano Studies

High-impact practices (HIPs) are educational experiences that actively engage students in the education process, go beyond the classroom, and apply to their personal and work lives. Types of HIPs include Freshman Seminars, Internships, Common Intellectual Experiences, Learning Communities, Writing Intensive courses, Collaborative assignments and projects, service learning, community based learning, etc. Other research has shown that HIPs increase rates of student retention, student engagement, and graduation. Our research project is an assessment of the HIPs that are used at California State University Dominguez Hills. The purpose of our research is to find out what high-impact practices are being used and not used in the classrooms and how effective they are on the success of a student's education. Using our results, we would like to inform other students how HIPs are important to their education. The project will be done using data that have been previously collected from all department chairpersons. These data will include what kind of HIPs the faculty members of each department are utilizing in their classrooms. We hope our results demonstrate that there is a variety of HIPs used by faculty members. In our results, we do not expect to see the usage of a lot of HIPs on campus. Nevertheless, our results will show what HIPs are needed and how frequently current HIPs are being used in classes. Upon examination of these results, we hope to find that the HIPs that are currently used on campus address student education and preparation for success. Our results affect college students because HIPs are opportunities to become prepared for the future. High-impact practices help create well-rounded students who are more than just the sum of grades and test scores, for example, students who are involved in extracurricular activities, form relationships with peers and faculty, and become ultimately successful in life.

California State University, Dominguez Hills
Faith Duyan and Geovany Paiz, Physics

Ultrasound Spectroscopy

Faculty Mentor: Claudia Peyton, Occupational Therapy

Non-contact ultrasound is an up and coming advancement in medical imaging applications because it imitates an x-ray without the harmful long term effects. It would allow a 3D ultrasound scan to be made robotically with a preprogrammed scan that is similar to a 3D x-ray scan made by a CT scanner without the need for coupling gels. It is a faster and non-invasive way to diagnose osteoporosis or breast cancer. Other possible uses for noncontact ultrasound include fetal and eye imaging; this method removes the need for a gel medium. This method will be applied to burn treatments as well as full body imaging. It is important to note that x-rays are different from ultrasound because they make use of ionizing radiation. However they are similar in the sense that they both use scattering particles that pass through the body parts to be examined. The previous data collected from the past experiment done on cortical bone phantoms will be compared to our collected data. We will examine the broadband ultrasound attenuation by comparing the relationship between the speed of sound and density in each cortical bone phantom sample. A previous result implied that non-contact ultrasound might be used in diagnosing osteoporosis and other medical conditions as well as conventional ultrasound with a robotic noncontact scanner that is able to emulate a CT scan. We hope to contribute in developing further research concerning measuring bone mineral density.

Stephanie Ellor and Cristina Garcia, Psychology

Situations of Helping Behavior

Faculty Mentor: Heather Butler, Psychology

An experiment was conducted in order to examine what circumstances affect someone's willingness to assist in an emergency situation. The reaction time of an individual or a group of people was recorded in order to determine the immediacy and responsibility felt by the stranger. The study looked to examine whether an individual or group was more likely to assist when they were made responsible (or not made responsible) in an emergency situation. People who were alone were just as likely as those in a group to assist in an emergency situation. Those who were given responsibility were much more likely to assist in an emergency compared to those who were not given responsibility. Lastly, individuals reacted much quicker when they were given responsibility but for groups, those who were not given responsibility had a much more immediate response time. This experiment suggests that the explanation for why people choose to help (or not to help) lies in their cognitive checklist, better known as Latane and Darley's' (1968) bystander intervention model.
Student Research Day 2015- Abstracts

David Felix, Chicano Studies

Latin Cancer Disparities

Faculty Mentor: Maricela Chavez, Chicano Studies

Many different types of disparities continue to plague Latin American communities in the United States today. Specifically health disparities remain a resonating predominant and under addressed inequality. Health disparities exist in Latin American populations as differences in prevalence, mortality, or incidence of diseases and health conditions. This also includes the differences in services for such diseases, which range from preventative medicine, to mental health services, to prenatal care, to cancer screenings for individuals in those communities. How do health disparities, specifically cancer education and screenings affect Latin American communities with high numbers of low-income and undocumented populations? Health disparities relating to cancer prevention, education, and screenings affect Latin American communities greatly. The health disparities in cancer education and screenings lead to later diagnoses, while the hurdles of treatment cost and options translate to higher mortality rates in these communities. This research will aim to illustrate the services and screenings offered in non-Hispanic white communities compared to those in predominately Latin American based communities. The research will also look to identify the difference in mortality rates of a variety cancer forms from Latin American communities and their non-Hispanic white counterparts. Sources that would contrast education services and preventive medicine will also be looked at such as “The Hispanic Outlook on Higher Education”. Statistics from sources such as the Center for Disease Control and the American Cancer Society will be used to substantiate my claim. A look at academic journals describing trends in screening of Latin American groups to non-Hispanic white groups, like Journal of Women’s Health. Primary sources from two first person accounts of a family member of a cancer patient and their experience with the health care system will be used.

Thomas Foley, Psychology

The Relationship between Aggression, Gender, Age, and Cognitive Priming in Dominguez Hills Students

Faculty Mentor: Karen Mason, Psychology

The Buss-Perry Aggression Survey (Buss & Perry, 1992) was used to measure the attitudes of students regarding Physical Aggression, Hostility, Violence and Verbal Aggression. Four hypotheses were investigated. Forty people were selected from the CSUDH Library. There were 12 males and 28 females, mean age was 33.3 (SD = 14.5) years with a range of 21 - 66 years. Three hypotheses were investigated. 1) Males report more physically aggressive acts than females. 2) Age and verbal aggression are positively correlated. 3) Violent Images increase self-reported physical aggression hostility anger. A t-test was run to examine hypothesis 1. The mean score on the Physical aggression measure for males was 3.24 (SD = 1.2), whereas females scored average of 2.5 on the physical aggression measure (SD = 1.1). There was not a significant difference between the male group and female group in terms of score on the physical aggression measure, t (38) = 1.69, p = .099. A Pearson correlation was run to test hypothesis 2. The mean age was 33.33 (SD = 14.48) years, and the mean score on the verbal aggression measure was 3.3 (SD = 1.1). When gender was controlled a significant negative correlation was found r = -2.69, p = .049. For hypothesis 3, An analysis of variance showed that the effect of priming was significant, F(1,38) = 5.08, p = .048. Post hoc revealed in the priming condition of, physical aggression (M = 2.42, SD = .90) verbal aggression (M = 3.12, SD = 1.15) anger (M = 2.23, SD = .84) and hostility (M = 2.10, SD = 1.10) were significantly lower than in the control levels of physical aggression (M = 3.14, SD = 1.28) verbal aggression (M = 3.49, SD = 1.07) anger (M = 2.76, SD = 1.11) and hostility (M = 2.45, SD = 1.03).

California State University, Dominguez Hills
Michelle Frain,

Technology and Educational Impacts in Preschool

Faculty Mentor: Caron Mellblom, Special Education

Exploring new ways to meet student’s academic needs is important. Teaching strategies are constantly changing and a rise in technology use in the classroom has begun. Questions are arising from teachers on what type of impact an iPad would make on students ranging from three to five with an array of disabilities; furthermore, how will the iPad instruction differ from the familiar everyday teaching with manipulatives. In previous research it has been proven that technology device such as a computer, iPod or iPad not only impact a child’s academic success but also have a positive outcome on their attitude towards lessons (Eyyam et al, 2014).

According to Eyyam and Yaratan (2014) the world is changing in regards to the role technology plays in a students’ life and the school needs to prepare them for what is now and what is to come. It is allowing students with disabilities to grow as an individual in their society as well in the classroom. According to previous studies students benefit from the use of technology. Individuals with disabilities capable of accessing technology at the tip of their fingers means empowerment (Lewis, 1998). For some children, the ability to use a mouse on a computer is difficult, with limited movement in limbs due to a specific disability such as cerebral palsy; furthermore, for the students who do not understand the connection between the mouse and computer or have patience, having the touch screen on the iPad allows them to access the same things as everyone else (Shah 2011). Lastly, the students benefit and have a high success and attitude towards lessons by being able to use an iPad (Eyyam & Yaratan, 2014).

This study will apply academic applications in the areas of letter recognition and mathematics in the curriculum. Students will be randomly chosen and divided into two groups. Group A will be taught academic skills in the mentioned areas by using a modern teaching model. Group B will be taught in the same academic areas by using applications downloaded on the iPad. The results should show which teaching model has a higher impact on student’s success and attitudes towards lessons.

References

Student Research Day 2015- Abstracts

Jose Franco and Joshua Lozano, Psychology

Student Satisfaction In the Communications Department at CSUDH

Faculty Mentor: Nancy Cheever, Communications

As part of its 2014 Program Review, the Communications Department at CSUDH created and administered a paper Student Satisfaction Survey to better understand the factors that contribute to student morale. The survey was distributed by faculty in October 2014 to 354 Communications majors. Two psychology students used bubble scanning software to read the completed paper surveys, and descriptive data were analyzed by faculty in November 2014 for use in the program’s self-study. The students examined various other factors that contribute to student satisfaction, and relationships between several of the variables. This presentation includes the results of that analysis, using a one way analysis of variance. The purpose of this study is to gain a better understanding of the Communications students’ satisfaction. This will allow the department to address the needs of its students and determine which areas need attention and in which areas students are most satisfied. We will examine graduate school interest, focusing on which of the major options are most interested in attending graduate school and how many first generation college students are involved in the Communications Department program. In addition, we will focus on whether enrollment status correlates with future graduate school attendance. This presentation will also focus on determining the satisfaction levels of students in the Communications Departments according to their class ranking. Preliminary results show that overall, 85% of students agreed or strongly agreed they are satisfied with the quality of instruction, while 91% reported they take pride in being a Communications major. The results show that 81% of Communications majors work, while 87% attend the university full-time. More than half (56%) of students are the first in their family to attend college.

California State University, Dominguez Hills
Hypothesis: It is common that adolescents will struggle with self-esteem in their teenage years. This study investigated how parenting, peer relationship indicators and stress correlated with adolescent self-esteem and self-confidence. We hypothesized that indications of poor relationships would correlate with lower indications of self-esteem and self-confidence. We expected these correlations would be stronger among males.

Methods: The sample consisted of 452 European high school adolescents (49% female), ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in the northwest of Italy and in the northeast of Holland. The participants were representative of the population of adolescents attending high school in these parts of Italy and Holland. Regression analyses were used between the following variables: self-esteem, self-confidence strictness of family rules, parental support, peer pressure, friend support, body image and Stress. Analyses were conducted separately by gender.

Results: Results indicated body image (r= .48, p< .01) and friend support (r= .19, p< .05) to be positively correlated with self-esteem and self-confidence (r= .18, p< .05) (r= .25, p< .05) respectively. Among males, parental support was found to be negatively correlated with self-esteem (r= .14, p< .05), while self-confidence was negatively correlated with peer pressure (r= -.17, p< .05). Self-esteem was found to be negatively correlated with Body image among females only (r= -.23, p< .05)

Conclusions: Findings reflected the strong influence that Body image has on female adolescent Self-esteem and how there is a strong influence of parental support has on the self-esteem of male adolescents. No findings were present among males. Study implications are discussed.
Student Research Day 2015 - Abstracts

Liliana Galindo, Julia Ramirez, Psychology

Romantic Relationships Affected by Shyness, Self-Disclosure, and Computer-Mediated Communication

Faculty Mentor: Steve Frieze, Psychology

Research findings suggest that evaluative cues produce anxiety in shy individuals and impede them from initiating and engaging in self-disclosure (Meleshko & Alden, 1993). Consequently, computer-mediated communication (CMC) may be an alternative strategy for shy individuals as it enables them to overcome their fear of rejection and the negative self-presentation that they encounter in face-to-face social situations (Parks & Floyd, 1996). This study investigates the influence that shyness, receptiveness to self-disclosure, and modality of communication have on an individual’s relationship expectations and positive emotions. A modified version of the Revised Cheek & Buss Shyness Scale (1983) will be used to delineate shy from non-shy individuals in order to establish the extent to which shyness affects their willingness to engage in a new relationship. Participants will be randomly assigned to one of four manipulated conditions that will include a communication medium (synchronous-webcam or asynchronous-instant message), and self-disclosure (low or high) manipulation. Participants will complete two measures: a modified version of the Self-Disclosure Items (Wheeless & Grotz, 1976) questionnaire to measure their propensity to self-disclose, and the Positive and Negative Affect Schedule (PANAS) (Crawford & Henry, 2004) to gauge their enthusiasm in forming a new relationship. It is hypothesized that participants in the asynchronous-instant message condition will rate higher in positive affect than those in the synchronous-webcam condition. It is further hypothesized that individuals exposed to the high self-disclosure condition will be more optimistic about forming a new relationship than those in the low self-disclosure condition. Lastly, it is predicted that shy participants will report lower positive affect, and be less optimistic about forming a new relationship than non-shy participants. This study will add to the literature on shyness and those potential remedies for improving relationship formation.
Student Research Day 2015- Abstracts

Liliana Galindo-Gonzalez, Stephanie Reynoso, Stephanie Ellor, Psychology

Inferring Personal Value through Clothing Choices

Faculty Mentor: Steven Frieze, Psychology

It is well established in popular culture that the clothes you wear may not only influence others around you but how you look at yourself. Research by Tiggemann and Andrew (2011), found that clothing can significantly affect a woman’s well-being. Also, Rod and Lennon (2000) found that women took part in appearance-management in order to achieve the cultural ideal of beauty. The idea of appearance management is similar to impression management; both require that the individual manipulate their appearance in order to create what the individual perceives as a socially acceptable version of themselves. Western media has made it clear, that in order to be considered attractive, a woman must adopt a sexualized look (Moore, 2010). So even if other styles of clothes are available, women are still being faced with choosing between the attractive sexy clothing or less attractive alternatives. Because clothing choices have been known to affect a woman’s opinion about herself, it is therefore important to understand if the choices and decisions they make regarding their clothing are dictated by factors other than pragmatism.

This research employed a 2 X 2 factorial design and will investigate the extent to which an environmental variable (work place or school) and the expected composition of that environment (males or females) will dictate the choice of clothing for female only participants. The study will also explore the rationales women offer for their choice of clothing. Participants will have the opportunity to make 5 outfit selections from 30 outfit choices that were obtained from popular store catalogs (e.g. Forever21). In this study self-objectification is defined as the propensity to choose clothing that shows more flesh. It is hypothesized that a woman who rates high on the Trait Self-Objectification Questionnaire (Noll and Fredrickson, 1998) will elect more provocative clothing as an impression management technique in order to elevate her perceived self-worth.

Sade Galvez, Social Work

Exposing the Welfare System

Faculty Mentor: John Hsiao, English

Substance abuse in the welfare system is going unnoticed, and this problem manifests to bigger issues, such as child abuse and mental health issues. The welfare system is provided for those who are incapable to provide proper necessities to their children. Forms of child abuse are under the care of those who are on welfare. Social Work is needed directly to counteract this systemic problem. Children are going through emotional, physical, and sexual abuse due to guardians that are battling some form of addiction. Many of these individuals that are battling with addiction also have a mental health problem without awareness. Mental health illnesses could be the reasons as to why individuals are abusing drugs or alcohol. Moreover, the lack of employment seeking individuals in the welfare system can also be a result from a combination of a mental illness and/or substance abuse problems. Different types of mental health assistance in the welfare system, such as psychological, psychiatric therapies must be provided for those who are victims of substance abuse. Solutions to these issues will be seen in the application process, and individuals will be given a drug test and a mental health screening. This study will explain the drug addiction in the welfare system along with the problems that are a result as well as offer possible contributions for points of departure. Analyzing these issues and providing solutions along with highlighting steps of action will also be emphasized as to give insight as to how the welfare system can improve.

California State University, Dominguez Hills
My research paper is about the lifestyles and consequences on customized cars, which lifestyles include the King of Customized Cars named George Barris and how positive it is to have wireless Internet on customized cars, how customers can customize a one-of-a-kind car by imagining and creating their personal designs, and how customized cars show action, appearance, and entertainment from movies that are either about or involve with customized cars. The consequences include mass customization that can explain three basic reasons about buying a customized car which are weak connection, achieving strategic manufacturing, and the cost of customizing a car; state franchise laws, dealer terminations and auto crisis can create problems to the economy and car dealership business which can result in car dealership business going out of business and economy will be in jeopardy; and there are results, stating that some U.S. states banned direct manufacturer sales because of dealer concerns, benefits of direct manufacturer auto sales, and auto dealer franchise system. My research paper includes my point of view, known as the synthesis/truth, which is I agree with the rebuttal, or consequences, because mass customization will create a long march, firms will exploit depletion to increase revenue due to consumers lacking expertise in a product class, assessing utility requires effort that can deplete limited mental resources, and consumers are partially foresighted in their allocation of mental resources; and customized cars are tangible products that can create disintermediation.
Counting Blessings Versus Expressing Thanks: An Experimental Test of Gratitude’s Impact on Well-being and Personal Development

Faculty Mentor: Giacomo Bono, Psychology

There is ample evidence that gratitude is one of the most important character strengths for promoting well-being. Two common interventions used in research include gratitude journaling and expressing gratitude to benefactors. Aside from one study that compared these two techniques against 3 other common positive psychology inductions (Seligman, Steen, Park, & Peterson, 2005), no other research has directly compared the effectiveness of these two interventions. Furthermore, researchers have criticized intervention research for not using true control groups and instead evaluating the effects of gratitude-inducing conditions against conditions involving a focus on hassles or complaints, which does not provide a neutral comparison group (Wood, Froh, & Geraghty, 2010). Finally, though gratitude has long been suspected of increasing habits of self-improvement, intervention research has not explicitly examined such effects. Thus, the aim of the current experiment is to examine if two common practices for inducing gratitude, gratitude journaling and expressing thanks, influence well-being and achievement. Specifically, 120 demographically diverse young adults (ages 18-35, consisting about equally of both genders and various ethnicities) were obtained through a snowball sample and were randomly assigned to one of three conditions. A journaling condition instructed them to describe three good events that occurred during the week and the persons responsible for such events, a thanking condition instructed them to write and then read a thank you letter to someone who significantly impacted their life, and a control condition instructed them to write about the physical details of three settings where they had social interactions during the week. Measures of gratitude, moods, satisfaction with life, achievement motivation, self-efficacy, and growth mindset were obtained before and after the intervention. This study will provide preliminary results examining whether the two gratitude conditions differ in terms of their effects on these measures of well-being and achievement, compared to the control condition.

EFFECTS OF MUSIC AND TERRORISM ON AGGRESSION

Faculty Mentor: Kyran Barr, Psychology

This study intended to find the effects of non-lyrical music and terrorism on hostile aggression. Eighty participants, from a diverse southern California university were included in this study that ranged from 18-59 years of age. Participants were asked to read an aggression-provoking scenario of a hostage either being beheaded by a terrorist group or a hostage escaping the terrorist group, all while having either aggressive or non-aggressive music playing in the background. Participants’ levels of aggression were measured using the Aggression Questionnaire. Results found no significance in main effects nor interaction, as non-lyrical music nor the terrorist scenario seemed to influence aggression to increase or decrease.
Anthropology 313: How I Learned To Love the Magnetometer

Faculty Mentor: Jerry Moore, Anthropology

The Dominguez Ranch was part of the oldest Spanish land grant in California, known as Rancho San Pedro. It was given to Juan Jose Dominguez in 1784 by the Spanish Crown for his services as a Spanish soldier. The original Dominguez adobe was abandoned and possibly demolished after Juan Jose’s death. It wasn’t until the 1820’s that the Dominguez house was built. Completed by Juan Manuel Dominguez in 1826, it became a working ranch until the 1920’s. Now a California Historical Landmark, The Dominguez Ranch is an important part of California history. Our main emphasis for the project is based on surveying the Dominguez Ranch in Compton, California, known as the Rancho Dominguez Project, with new technology equipment called the Overhauser Magnetometer/Gradiometer GSM 19 series from GEM Systems.

Our main focus for this project is to survey specific areas we termed Alpha, Bravo, and Charlie, in order to get magnetic field readings and collect data information on anomalies penetrated in the ground. The purpose for this is to see if there are sufficient findings in order to determine whether future excavations are necessary or not. We have based our examples on the use of the Overhauser Magnetometer/Gradiometer GSM-19 series from GEM Systems. We have concentrated mostly on practical aspects of magnetic survey for the investigation of the archaeological site of the Dominguez Ranch. Magnetometer surveys are among the most effective and universal among the geophysical methods used for archaeology because many archaeological objects have distinctive magnetic properties which allow one to distinguish them on the surface of the site by the specific magnetic anomalies they create. We based our research on the archaeological question of; Previous GPR survey and excavation identified three rectangular features on the south side of the modern ranch house tentatively interpreted as buildings. Will magnetometer survey corroborate those results? Are additional features present that might be investigated in future excavations?
Brandon Gay, Anthropology

Ciudadela Rivero Decision Domains and the Construction of Cultural Space

Faculty Mentor: Jerry Moore, Anthropology

The Chimu Empire, which lasted from approximately 900 AD to its conclusion in 1470 AD, is a prehistoric culture that has left behind magnificent cultural architecture that has been the center of archaeological debate. The prime example of this architecture and debate can be found in the Chimu Empires capital and largest city of Chan Chan. Within Chan Chan there are 10 monumental structures known as Ciudadelas that comprise the urban center of Chan Chan, and is the focus of this research. Through researching this site it became apparent that archaeologists have brought forth varying hypotheses to explain the purpose of the Ciudadelas. These hypotheses have varied drastically with some archaeologists arguing that these Ciudadelas were administrative centers for a redistributive society; while others argue that it is a ritual center where ritual elites performed spiritual acts for the public. All of these are based on the physical structure of the Ciudadelas. This project uses Amos Rapoport’s arguments of decision domains to better understand the site and the hypotheses. He argues that when a society creates architecture it must fulfill certain societal needs while recognizing environmental restraints. These different decisions, both physical and cultural, are what comprise what Rapoport describes as “decision domains”, and when these different decisions are what shape a structure. This project attempts to identify the different cultural and physical decision domains that go into the construction of the Ciudadela known as Rivero. Upon identifying the different decision domains made in the construction of Rivero this presentation will apply these domains as a lens to view and assess the different hypotheses. By ruling out the improbable and maintaining the probable it is the hope of this project to understand the purpose of these monumental Ciudadelas.

Ken Givens, Music

Streaming Consciousness

Faculty Mentor: David Bradfield, Music

Streaming Consciousness is an instrumental piece that joins elements of experimental music together with a video presentation, taking the listener/viewer on a journey. My goal was to make this piece relatable to anyone. This project is six minutes, divided into four sections with each section about one and a half minutes long. I selected video elements that struck a chord in me directly or subconsciously. The first three sections contain experimentally altered melodic fragments of the main theme that are fully revealed in the last section. There are visual and musical elements that affect the listener/viewer on a subconscious level, such as the auditory illusion of the Shepard’s tone between 1:50 -2:45. The tone seems to continually rise or fall, but never reaches a point of resolution, creating a sense of uneasiness and constant motion. Between each section, there is a reoccurring transition that becomes recognizable, leading into the next section. The music was composed and recorded using Logic Pro X. iMovie was used to edit the video. Video segments from www.videoblocks.com. “Streaming Consciousness” https://www.youtube.com/watch?v=81TXABcpEyk is a reflection of what’s been on my mind consciously and subconsciously. Currently my consciousness is streaming:

• Cosmology
• The Challenge of life
• Faith & Humanity
Student Research Day 2015- Abstracts

Rose Golden, Trevor Glenn, Occupational Therapy

A Narrative Study Exploring Caregiver Perception of Constraint-Induced Movement Therapy

Faculty Mentor: Claudia Peyton, Occupational Therapy

Constraint-induced movement therapy (CIMT) seeks to improve the functionality of a hemiplegic cerebral palsied child’s affected limb by forcing its use during the completion of activities while the other (unaffected) limb is restrained. Caregivers play a significant role during a child’s CIMT treatment process to encourage compliance and the use of the affected extremity while performing various single handed and bimanual activities. Despite the caregiver’s important role in the application of treatment, available research on the caregiver’s experience of the treatment process was limited. The purpose of this narrative study was to examine the experience of CIMT treatment for the caregiver’s of cerebral palsied children. A narrative approach was used to examine the stories of six caregivers. Prevalent themes were identified using the software NVivo to construct a chronological storied experience. Common themes among participants included the caregiver’s changing role(s), sometimes-stressed interpersonal relationships, and a positive regard for the child’s future. Statements differed amongst participants due to differences in the developmental and chronological age of each participant’s child, the caregiver’s reported degree of desire to have their child achieve a specific functional goal, and the degree in which compliance was reportedly reached. Information from this study reaffirms the importance of the caregiver during CIMT treatment in promoting compliance and working toward individual goal achievement and is beneficial for those who recommend and implement CIMT treatment protocols. However, it is noted that because the study included a small sample of caregivers, more research would need to be done to determine the extent in which any of these variables influence the caregiver experience.

Omar Gomez, Daniel Delgado, Psychology

The Relationship between Anxiety, Self-Efficacy and Working Memory in Older Adults

Faculty Mentor: Karen Wilson, Psychology

The purpose of this study is to examine the relationship between anxiety, self-efficacy and working memory in adults, ages 50 and above. Anxiety is often overlooked in older adults, although it is associated with cognitive impairment, such as decreasing working memory capacity. Limited studies have examined anxiety in older adults and executive functions. According to the Centers for Disease Control and Prevention (CDC, 2011) the primary factor for cognitive impairment is age. Research also suggests that approaches aimed at enhancing cognitive abilities is not sufficient and that factors such as self-efficacy may play a role in how older individuals believe that they will perform on a memory task in comparison to when they were younger (Carretti, Borella, Zavagnin, & De Beni, 2011). It is hypothesized that the higher the self-reported anxiety scores (as measured by the Beck Anxiety Inventory) the lower the scores on the General Self-Efficacy (GSE) scale. Further, higher levels of self-reported anxiety are expected to be associated with greater difficulty in working memory (as measured by the BRIEF) in older adults. Preliminary results from a sample size of 10 indicate a moderate but significant negative correlation between anxiety and self-efficacy supporting the first hypothesis. However, a significant correlation between anxiety and working memory was not supported. These results suggest anxiety may be influential in older adult’s self-efficacy but not on working memory. Such findings may shed greater insight into the relationship between anxiety and executive functions in older adults, which may lead to greater prevention and intervention programs.

California State University, Dominguez Hills
Student Research Day 2015- Abstracts

Paige Gonzales, Business Administration

The Money Maven, Rupert Murdoch

Faculty Mentor: Gary Polk, Management and Marketing

This research examines the managerial style of Rupert Murdoch. First, I researched the early life of Murdoch; family roots, education, and financial upbringing. The research exposed Murdoch’s affluent youth, Oxford education, and beginnings to his media empire when he inherited his father’s newspaper company. Murdoch’s managerial style reflected his tactical business ways, a gambler, cutthroat, and autocratic. The research revealed Murdoch’s relentless financial motives and dislike for interpersonal relations. Rupert Murdoch has earned his negative labels, as well as, being an honorable businessman. Though disliked by many, the shake of his hand for a deal means one thing, money!

Gabriela Granados, Art & Design

The Mexica and Their Profound Devoutness

Faculty Mentor: Kirstin Ellsworth, Art & Design

Art has provided insight into the lifestyles and beliefs of ancient people including the Mexica, more commonly referred to as the Aztec, who established the capitol of Mexico. Their migration into what is today Mexico City resulted from the mythical belief in a prophecy and their sculptures and artifacts bear witness to this intense devotion. The prophecy by the god Huitzilopochtli instructed the Mexica to settle where an eagle would appear perched on a cactus holding a serpent in its mouth (Gonzales 41), and this image reappears in the Codex Mendoza, which is to be discussed and explored in terms of stylistic orientation in line with their belief system. The myth continues to live on as the city has developed into one of the world’s largest; today the eagle is rendered with pride at the center of every Mexican flag. Religion guided all aspects of the Aztec empire and its vigor is rendered in their evolution, architecture, rituals, codices, calendar, sculptures, and other artistic objects. The sacred war enacted by the gods with the purpose to vitalize themselves with captives’ hearts, gave rise to the Aztec empire because of their profound faithfulness. Later that same faith would bring them their demise.
**Student Research Day 2015- Abstracts**

**Gabriela Granados, Arts and Design**

Chicano Murals: Educational Conduits for Future Generations

Faculty Mentor: Marisela Chavez, Chicana/Chicano Studies

Academically, art has served as a conduit of expression that has aided our understanding of the past. Artists use their skills to manifest ideas, beliefs, and inner turmoil. Mexican muralists selected large walls as mediums, and rendered indigenous concepts that were metaphorically used to illustrate contemporary social and political issues. Inspiration for Chicano murals comes directly from Mexican muralists. Chicano murals serve as historical and contemporary narratives that aid the understanding of Chicanoism, the Mexican-American political identity that attempts to liberate Chicanos from cultural and social oppression. The location of these murals in living communities and public buildings emphasizes the social responsibility felt by Chicano muralists to revive their cultural nationalism. Mexican and Chicano murals convey strong political messages. These messages are depicted using indigenous symbolism; yet, it must not be assumed that Mexican and Chicano muralists’ depictions are synchronized. I intend to create a compare and contrast analysis focusing on Mexican muralist David Alfaro Siqueiros’s America Tropical, and two Chicano murals, Mario Aguirre Uruarte’s 500 Years of Indigenous Struggle and Charles Felix’s El Tajín, from the Los Angeles area. The murals bear some aesthetic similarities in subject matter and themes, with the differentiation of context. Chicano murals are representations of Chicano cultural nationalism, and should serve as an educational conduit that instructs future Mexican American generations about their people’s history, struggles, and realizations.

**Lawren Green, Health Sciences**

The Association of Depressive Feelings to Adolescent Mental Health

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Depression is prevalent in adolescents. According to the National Comorbidity Survey Adolescent Supplement about 11 percent of adolescents have a depressive disorder by age 18. This study investigated how different mental and social health indicators correlated with depressive feelings among adolescents. We hypothesized that indications of poor mental and social health would correlate with greater depressive feelings. We hypothesized that these correlations would be stronger in older adolescents.

Methods: The sample consisted of 452 European high school adolescents (49% female), ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in the northwest of Italy and in the northeast of Holland. The participants were representative of the population of adolescents attending high school in these regions. Correlation analyses were used between the following variables: depressive feelings, self-esteem, self-confidence, aggressive behaviors, suicidal thoughts, and stress. We used an adaptation of Jessor’s Problem Behavior Theory Health Questionnaire to assess our variables of interest. Analyses were conducted separately by older (18-20 years) and younger (15-17 years) age groups.

Results: Findings among younger adolescents indicated depressive feelings to be associated to self-esteem (r = -.25, p< .01), self-confidence (r = -.30, p< .01), suicidal thoughts (r = .45, p< .01), and stress (r = .67, p< .01). Results were similar among older adolescents however correlations proved to be weaker in magnitude.

Conclusions: Results reflected the powerful influences that depression has in each age group. Study implications are discussed.

*California State University, Dominguez Hills*
**Student Research Day 2015 - Abstracts**

**Tene’ Green, Public Administration & Public Policy**

Case Studies of California Cities

Faculty Mentor: Rui Sun, Public Administration & Public Policy

The role of the public in public administration continues to be deliberated and defined. The intended consequence is to move toward a more participatory democracy. For example, many local governments solicit public participation in their budget preparation. During this process, community residents and local public administrators meet to discuss budget issues and plans that will affect their local communities. This paper examines the role of the public in local budgeting process using three case studies of California city governments. The study finds that including the public in the budgetary planning process facilitates relationship building between citizens and public administrators. Findings from this study also suggest that public agencies who are seeking to involve citizens in their planning process need to encourage early participation, give citizens enough time to process all of the information and provide them with relevant facts regarding the issue so that citizens can have adequate time to convey their thoughts and ideas in public forums.

**Natalie Gregg, Aubrey Kaneshiro, Abigail Lobatos, Erika Martinez, Angelica Rivera, Psychology**

The Effects of Physiological Arousal and Gender on Helping Behaviors

Faculty Mentor: Heather Butler, Psychology

The present study was conducted in order to examine the effects of gender and physiological arousal on helping behavior. It was hypothesized that females would be more likely to engage in a helpful behavior as opposed to males. Secondly, it was hypothesized that physiologically aroused individuals would be more likely to engage in a helpful behavior as opposed non-aroused individuals. Lastly, it was hypothesized that physiologically aroused females would be more likely to engage in a helpful behavior compared to non-aroused females, non-aroused males, and aroused males. A convenience sample of 98 participants was selected and participants took part in a 2x2 in between subjects factorial design experiment made up of physical activity, a vignette, and a questionnaire. Results indicated females were significantly more likely to engage in helping behavior as opposed to males and aroused individuals were significantly more likely to engage in a helpful behavior as opposed to non-aroused individuals with no interaction between gender and arousal.
DaMark Gresham, Sociology

Framing The American Dream in Nursing Education

Faculty Mentor: Jose Prado, Sociology

In this paper analysis is conducted about vocational nursing schools that exist within post-industrial contexts. To do so I examine structural limitations at these schools – i.e., the absence of racial minority educators in nursing schools marketed to racial minority students, the accelerated nature of instruction at these schools – and their impact on racial minority nursing students' educational aspirations. Additional attention is placed on racial minority nursing students' ascriptions to narratives of educational and professional success. My presentation closes with important questions about mainstream definitions of the “American Dream” that are harnessed in the marketing campaigns of nursing schools.

Elizabeth Grotemeyer and Cassandra Maddux, Chemistry

Methylparaben in Blueberries

Faculty Mentor: Barbara Belmont, Chemistry

Methylparaben, or methyl p-hydroxybenzoate, is an ester of hydroxybenzoic acid that is commonly used as a preservative in commercial and cosmetic products because of its antifungal and antimicrobial properties. This compound is routinely cited as occurring naturally, particularly in blueberries, both in popular information and in scholarly literature. Although there are many instances where the presence of methyl paraben in blueberries is mentioned, there is a frustrating lack of published literature that describes the experiments to support this claim for blueberries. The purpose of this project is to investigate this literature claim that blueberries contain methylparaben and, if it is true, to determine at what concentration this compound is present in blueberries. Our initial approach involved the use of HPLC-UV and an external standard method of calibration and limit of detection testing. We used calibration standards ranging from 0.25 to 15 pppm of methylparaben in methanol. Then, methanolic extracts of known masses of mashed blueberries, adjusted to a known volume, were analyzed by reverse phase HPLC-UV-MS in selected ion monitoring (SIM) mode and HPLC-UV-MS-MS in Collision Induced Dissociation (CID) mode. Analysis of the data obtained from these processes revealed a significant background signal, which interferes with detection limits below 1ppm. Our preliminary findings suggest that there may not be methylparaben in blueberries, or if it is present, it is at concentrations of less than 1 ppm. Our future work will involve HPLC-UV-MS-MS with SIM/CID along with an internal standard and standard addition method of calibration. We will also attempt to reduce the background signal that obscures the analyte signal by using ultra-pure solvents in sample preparation.
Student Research Day 2015- Abstracts

Elizabeth Grotemeyer, Cassandra Maddux, and Warren Nanney, Chemistry and Biochemistry

Reconceptualizing Laboratory Curriculum to Improve Hybrid Courses.

Faculty Mentor: Kenneth Rodriguez, Chemistry and Biochemistry

A hybrid laboratory curricula with a cyberenabled liquid chromatography/mass-spec/mass spectrometer (LC/MS/MS) has been incorporated as a key instrument to help improve students’ preparation in chemistry and to enable wider educational and professional opportunities for Science, Technology, Engineering, and Mathematics (STEM). The main goals were 1) to reconceptualize laboratory curricula in order to integrate new technology and 2) to improve students’ access to advanced instrumentation in chemistry in order to address student needs as well as the changing manner of pursuing scientific research. The skill acquisition and concept attainment/reinforcement purposes of the chemistry lab were separated. Skill acquisition (such as titrations, etc.) remains in the classical laboratory setting. However, students’ presence in the lab is not needed for the concept attainment/reinforcement portion, where manual skills are limited to using an instrument that can be controlled remotely without introducing human error. Thus, to harness the efficiency provided by advances in instrument technology, laboratory instruction were reconceptualized to provide students with real-world skill development in a laboratory experience that reflected the manner in which scientific work is presently done. A reconceptualized chemistry laboratory curriculum for a lower division, Quantitative Analysis lab and upper division Advance Integrated lab curriculum demonstrated the outcome and significance of success having utilizing the cyberenabled instrumentation. Utilizing the LC/MS/MS spectrometer allowed us to expand this hybrid curriculum while fostering the potential for their students to access research instrumentation online.

Jeff C Guevara, Physics

Testing the Leading Theories of Everything using Bound and Free Neutrons at Super-Kamiokande and at Other Pticle Physics Laboratories

Faculty Mentor: Kenneth Ganezer, Physics

We will present our most recent results on determining the lower limit on the bound and free neutron oscillation lifetimes in oxygen-16 and discuss how these results relate to searches for Grand Unification and the Theory of Everything. Right-Left Symmetric Gauge Theories with the seesaw mechanism have been the favored candidates for the Theory of Everything for the last 25 years or more. In particular we will present the most recent limits from SuperKamiokande on bound neutrons which include all significant experimental uncertainties and as well as the theoretical uncertainty on the nuclear suppression factor that is needed to calculate the limits on free neutrons in oxygen-16. We will also discuss proposed experiments on free and bound neutron oscillation at the European Spallation Source and at other laboratories, as well as recent theoretical developments involving neutron oscillations. The lower limit of the lifetime of bound neutrons was determined to be 1.9 x 10^{32} years at the 90% confidence level. The corresponding lower limit of the lifetime of free neutrons was determined to be 3.4 x 10^{8} seconds before including the theoretical uncertainty. The authors would like to acknowledge NSF particle astrophysics Grant number 0901048, Title: Neutrino Physics, Baryon Number Non-Conservation, and Astrophysics at Super-Kamiokande and the T2K Long Baseline Experiment which supported this research for the last 4 years.
**Student Research Day 2015 - Abstracts**

**Jeff C. Guevara, Physics**

Writing a MATLAB Program for Hartree-Fock Calculations of Molecules in One Dimension

Faculty Mentor: Kenneth Ganezer, Physics

Quantum chemistry is a branch of chemistry that uses quantum mechanical models to study molecules at the subatomic level. The molecules being studied are small enough that classical mechanics does not always provide a good description. Computational quantum chemistry uses computer simulations and methods of theoretical chemistry to make predictions and to determine the structures and properties of systems. The time evolution of chemical systems can be described by a matrix form of the Schrödinger equation. The eigenvectors of this matrix are the steady state solutions and the eigenvector with the lowest energy eigenvalue is the stable ground state of the system. The Hartree-Fock method provides an approximation for the determination of the wave function and energy of a nonrelativistic, many-body system by using an iterative method that generates a sequence of improving approximate solutions that converge. The focus of this project is to use the Hartree-Fock method to write a computer simulation in MATLAB to study a system in one dimension. The first goal is to simulate a model of the hydrogen atom. The second goal is to simulate a model of the helium atom. The third goal is to simulate a model of the dihydrogen cation (H2 +). The final goal is to optimize the computer simulation to reduce the computational cost. There have been third-party programs written in MATLAB to simulate molecules using the Hartee-Fock method before, but there is currently no official module in MATLAB for this purpose. This project seeks to explore the capabilities of the MATLAB numerical computing environment in simulating molecules using the Hartree-Fock method.

**Jeff Guevara, Physics**

Growing and Characterizing 2D Silica Bilayers on Graphene Epitaxially Grown on Ruthenium (0001)/Sapphire

Faculty Mentor: Eric Altman, Chemical & Environmental Engineering

Two-dimensional (2D) silica (SiO2) glass bilayers are a new form of SiO2 that is exactly 2 atoms thick with no dangling bonds. Since 2D silica bilayers have no dangling bonds, it is expected to be a van der Waals material with no detectable covalent bonding. Two-dimensional silica can have many applications in layered graphene electronics and dielectric layers in atomically thin transistors, along with applications as membranes that allow only molecules smaller than a specific size to fit through and where the atomic thickness promises unprecedented throughput. The goal of this research is to determine the optimal conditions for growing a 2D silica bilayer on a uniform graphene monolayer and to also study its characteristics and intrinsic properties when removed from all substrates. The first step is to determine the optimal growth conditions for growing a uniform graphene monolayer on epitaxial ruthenium (0001) on c-plane sapphire. The next step is to determine the optimal growth conditions of 2D silica bilayers on graphene. The 2D silica will then be isolated from the substrate so that its characteristics and intrinsic properties can be studied using Raman spectroscopy, transmission electron microscopy, scanning transmission electron microscopy, and electron energy loss and X-ray emission spectroscopy.
Rosemary Guillen, Health Sciences

Parents’ Hesitancy towards Childhood Immunizations?

Faculty Mentor: Enrique Ortega, Health Sciences

Currently in the U.S., there are 14 diseases that can be prevented with routine childhood vaccinations. Vaccines work by stimulating the injected child’s immune system with a tiny amount of the weakened or dead disease he or she is being vaccinated against. For example, the Hib vaccine contains a very small amount of the Hib bacteria (CDC, 2012). This deludes the immune system into thinking the child contracted the disease, and begins producing antibodies to defend against, and destroy, these pathogenic invaders. Thus, the child becomes immune to the disease, without having to contract the full-blown disease first. When routine vaccines are given correctly, immunity can be up to 90-100% effective (Vaccines, n.d.). There has been a dramatic drop in vaccine rates over the estimated last two decades due to the controversy between childhood immunizations and its link to autism. The purpose of this research day paper is to examine the beliefs and misconceptions parents have about childhood vaccinations, while also refuting the assertion of a link between childhood immunizations and autism.

Joyice Harris, Health Sciences

Medical Marijuana: The Future of Curative Herbal Medicine

Faculty Mentor: Claudia Peyton, Occupational Therapy

This research paper examines the beneficial and non-beneficial components associated with the usage of medical marijuana and its historical overview. This inquiry will also affirm how this drug is an acceptable alternative remedy to treat acute illnesses in lieu of the traditional medications prescribed by primary care providers. Marijuana is classified as a depressant and mild hallucinogen that stems from a plant scientifically specified as cannabis satvia (indica). Researchers from Harvard Medical School proclaim that Atetrahydrocannabinol, (THC) is, “responsible for its effects on the central nervous system. It stimulates cannabinoid receptors in the brain, triggering other chemical reactions that underlie marijuana’s psychological and physical effects — both good and bad” (Harvard Mental Health Letter. 2010). Ancient Asian cultures and global populations have benefited from using marijuana for thousands of years and it continues to be a prominent herbal medicine. In comparison to street and prescription drugs, marijuana’s addictive scale and adverse health effects ranks relatively low. In addition, there are a number of health benefits that could alleviate symptoms and treat chronic afflictions and diseases such as HIV/AIDS, cancer, glaucoma, and Parkinson’s disease. Contrary views concerning the usage of medicinal marijuana have spawned great controversy. The adversity between the U.S. government, states and American citizens has played a major role in determining whether marijuana should be legalized for medical treatment. This research, in addition, will identify the financial, societal, and scientific discrepancies that prohibit federal and state governments from authorizing marijuana as a supplementary treatment. In essence, despite legal and social curtailment, the future of using medicinal cannabis entails a wide range of promising health and societal benefits that can shape the way health conditions are treated while improving the overall health of the general public.
Natalia Hartoonian, Nursing

MSN 514 HEALTH PROMOTIONS AND DISEASE PREVENTION REDUCING EFFECTS OF STROKE IN ELDERLY

Faculty Mentor: Lauren Outland, Nursing

Statement of Problem: Stroke is fourth leading causes of death in the United States and the leading cause of serious illness, long term disability, and decreased quality of life. Every year; more than 795,000 people in the United States have a stroke. Stroke risk increases with age. 75% of stroke occurs in people aged 65 and older. Stroke costs the United States estimated $36.5 billion each year. However, effects of stroke can be reversed. 70% of stroke can be prevented mainly by effective early intervention. Therefore, it is critical that people age 65 and older learn how to recognize the signs of stroke and understand why prompt action can save more of the brain.

Method to Address Problem: Through application of the Heath Behavior Model, an intervention was created to reduce effects of stroke in adults over age of 65. The intervention includes baseline assessment of participant's knowledge regarding signs of stroke and understanding why prompt action is needed. Participants are required to participate in initial survey and to attend one hour education session in Ararat Adult Day Health Care Center. Each participant is provided with hand out material. Additionally, each participant requires participating in role playing. Participants are re-assessed regarding recognizing signs of stroke and understanding why prompt action is needed after three months post initial education. At the end of the intervention, participants should recognize four out of five stroke symptoms, and 95% of participants should understand term "three hour window" and verbalize why time is crucial in treatment of the stroke.

Description of Innovation: Health Belief Model believes that individuals will take action on their behalf if two things exist, 1) Perceived susceptibility to the problem, 2) Perceived seriousness of consequence of problem. A perceived seriousness of an illness may be a factor in compliance for individuals. A belief in Self-efficacy is important to getting compliance from individuals.

Implications of Research: Further studies are being conducted to evaluate the self-efficacy in relations to the Health Belief Model. Preliminary studies show that perceived severity as well as perceived vulnerability or susceptibility to contracting a disease will create motive to change behavior. Few studies have examined the factors associated with treatments delays in older adults experiencing the stroke. Additional areas for future research are whether the severity of stroke or being alone affects response time and the concept of denial in seeking care.
Ceilique Hatcher, Sociology

“The Anomie of Social Networking: Feelings of Isolation through Facebook”

We now depend on social networking sites to communicate with those that are important to us. Research has questioned if social networking sites, such as Facebook, create a sense of isolation (Deters and Mehl, 2012). I will be investigating the modern way we communicate with our peers and colleagues in the settings of computer mediated communication (CMC) on social networking. Within this research I will investigate if Facebook is related to isolation throughout different demographic groups such as age, gender, race, and geographical location. Mixed methods will be used to gather data on Facebook usage based on items that were found to be relevant to literature and other opinionated news articles. There will be a total of two sections that involve questions on how participants use Facebook and the levels of loneliness experienced while using the social networking site. In the first section there will include three parts. For the first part, participants will be asked for age, gender, ethnic background, and geographical location through a demographics questionnaire. Secondly, an altered form of Daniel Russell’s, “UCLA Loneliness Scale”, will use a rated scale based on questions such as, “Do you have a lot in common with people on Facebook”? Ratings will be 1-4 (1= never, 2=rarely, 3= sometimes, 4= always). In the third part, questions regarding Facebook will be asked such as the number of friends or activities conducted. The second section of the study will involve Facebook Content Analysis. The intended contributions of this research are for exploring the effects of computer mediated communication on loneliness. The research will show the possible outcomes of Facebook usage and isolation due to less face-to-face communication.

Katie Henderson, Jacqueline Koh, and Linde Moulton, Health Human Services and Nursing

The transition experience from independent living to a skilled nursing facility: A narrative analysis

This research study uses a narrative analysis qualitative method to explore the lived experiences of older adults who have transitioned from independent living to skilled nursing facilities (SNF). Moving into a SNF is extremely relevant in today's society, as the geriatric population is the fastest growing population in the world. Currently, there is limited qualitative research to understand this transition. Participants included six older adults (65+ years old) who transitioned into a SNF within the last ten years. The participants were recruited through the snowball technique, and participated in semistructured interviews. Themes were identified within the following two categories: factors supporting participant transition and barriers to participant transition. Supporting factors include: support systems, attitude, convenience and religion. Barriers include: communication, staff and homesickness. Implications of this study will allow occupational therapists and other healthcare professionals to gain a better understanding of important transition factors, enabling them to enhance transition experiences in the future.
Jennifer Henriquez, English

The Changing Expressions of Female Agency in Béroul’s The Roman of Tristran

Faculty Mentor: Debra Best, English

In Medieval Romance, conventions of gender are rigidly defined, yet the fantasy space created in these stories allows characters to manipulate societal expectations. Arthurian women, particularly, either circumvent or reinforce the traditions of femininity and marriage. Béroul’s The Romance of Tristran examines thematic issues common in Arthurian Romance, but with an emphasis placed on the roles and, subsequently, the responsibilities of gender. Moreover, Béroul uses the Yseut’s affair as a platform to discuss societal expectations concerning womanhood and marriage. Because of the affair, Yseut can manipulate circumstances to her benefit. This paper will therefore explore the subject of female agency. Specifically, this paper will explore how and to what purpose women express power, and the extent to which female agency is consistent in the narrative. This paper will argue that Béroul uses Yseut and her female compatriots to explore and dismantle societal perceptions of feminine power.

Critics have generally explored Yseut’s character in relation to her male counterparts. This paper will instead address the roles of the supporting female characters and their contributions to Yseult’s agency. Although Brangain and Yseut’s mother possess minor roles, their actions help to expand Yseut’s agency in the tale. In particular both Yseut and Brangain subtly navigate the limitations of their sex, to control and guide the outcome of the story. Moreover, the presence of the magical potion enables Yseut to engage her agency and work around the limitations placed upon her as a woman. Ultimately, this paper will address how Béroul uses Yseut and her female retinue to expand and explore the limitations of womanly agency.

Shawn Her Many Horses, Psychology

Maximizing Number of Satisfiable Requests in Random Ad Hoc Networks

Faculty Mentor: Bin Tang, Computer Science

Ad hoc networks are networks consisting of small computing devices with wireless interfaces. Each ad hoc node has limited battery power, and wireless communication consumes most of the battery power of node. To maintain the functionality of ad hoc network, it is critical that users inside the network can always successfully transmit messages to each other, and do so in an efficient way. In this work, we are interested in designing energy-efficient routing algorithms in ad hoc networks to maximize the total number of messages that can be successfully satisfied.

The existing approach has three limitations. First, it assumes that all the ad hoc nodes have the same initial energy level. Second, it assumes sending a message costs one unit of energy while receiving costs zero. In our work, we consider a more general energy model where different ad hoc nodes could have different initial energy levels, and energy consumption of sending and receiving routing messages depends on the distance between nodes. Third, the ad hoc networks simulated in current research is a simplistic grid network, which does not represent well the real ad hoc network applications. We extend it to a more realistic ad hoc networks that are randomly generated. We create an ad hoc network by randomly generating the nodes inside a field, and assign different initial battery power level to different nodes. We then transform the ad hoc network into a network wherein the edge capacity of each edge corresponds to the battery power of each node. Then we design a greedy algorithm that executes in iterations. In each iteration it tries to find the minimum weighted path connecting a source and destination pair while satisfying the capacity of each edge. We show via simulations that this algorithm performs well compared to some existing approach.
\textbf{Student Research Day 2015- Abstracts}

\textbf{Shawn Her Many Horses, Computer Science}

Song lyric analyzer and generator

Faculty Mentor: Mohsen Beheshti, Computer Science

This program analyzes a large set of song lyrics and generates a randomized set of new lyrics which resemble in form those lyrics written by a human based on various patterns that it observes. The set of lyrics inputted into the program are processed using statistical analysis. The program reads a data set of lyrics downloaded from the Internet and analyzes the lyrics to learn various forms of rhyme scheme, syllable count, etc. Using Python’s Natural Language Toolkit, it is able to generate a song lyric with a similar structure as those it has observed.

\textbf{Daniel Hernandez, Health Sciences}

Using Technology to grow a personal above ground garden while in observance of Southern California’s drought.

Faculty Mentor: Archana Sharma, Health Sciences

Southern Californians are busy people and usually overwhelmed by their personal lives so much so that they are too busy to grow their own gardens. I propose to build a self-sustained above ground garden that requires minimal care and attention by the owner. Through this I aim to discover if fruits and vegetables can be grown using an above ground garden fitted with an automated irrigation system, consisting of a vacuum water pump powered by solar cells. The garden will essentially water its-self using a dehumidifier that is attached to a water reservoir big enough to supply enough water to properly nourish the garden. Southern California has been in a drought of historic proportions (going on 9 years). Water is scarce but I believe that the water that is captured by the dehumidifier will alleviate the consumption of water due to home gardening.
Jacqueline Hilario, English

The Effects of Sexual Abuse

Faculty Mentor: John Hsiao, English

Sexual abuse has been around for centuries, but only has started to get reported in the 1970’s. Sexual abuse is a crime to knowingly be caused by one person or by many people to a victim by sexual acts that are not given consent by force or threat including neglect that leads to violence and physical and non-physical touching acts occur. Physical abuse is a non-accidental use of the force that results in bodily injury, pain, or impairment. Emotional abuse is any act that includes verbal assault, or any other treatment, which may diminish the sense of identity, dignity, and self-worth. The first steps to solving sexual abuse is by noticing sexualized behavior, such as, clinging, flirting, or public masturbation. The solution for physical abuse is making sure the child’s health, weight, and energy level is at the correct stability. The solution for Emotional abuse is working with the inner-child by encouraging the child to show their inner hidden self to release trauma. Seeing that sexual abuse consists of physical touching, physical non-touching, and having no consent from the child to have sexual relations. There needs to be a call to action from families to punish the perpetrator for the deviant acts they have committed. Physical abuse needs a call to action to stop non-accidental use or the force that results in bodily injury, pain or impairment because this will refrain from children dealing with this abuse. The best call to action for Emotional Abuse is by having the child let all the hurt that they feel, letting the child have a crying shoulder, and being the adult the child can trust. To stop the sexual abuse and all that is connected to it. There needs to be issues, solutions, and call to actions to stop victims from being sexually abused.

Malina Hong, Nallely Lopez, Fanessa Chiappinelli, Psychology

Academic Performance in Freshman College Students

Faculty Mentor: Karen Wilson, Psychology

The present study would provide insight into whether study habits affect academic performance of college freshmen. The study would generate insight into academic performance through study habits, which would improve the delivery of information to the student. The results from the study will not only benefit students, but professionals of academia themselves. The delivery of information is important because it determine whether a person can grasp the information and how long they can sustain the information. Studies that have examined the correlation between study habits and academic performance. Performance pertains to class or subject matter achievement, typically measured by cumulative GPA (Robbins, Lauver, Davis, Langley, & Carlstrom, 2004). Typical skill areas include time management, preparing for and taking examinations, using information resources, taking class notes, and communicating with teachers and advisors (Robbins, Lauver, Davis, Langley, & Carlstrom, 2004). Several studies (e.g., Kern, Fagley, & Miller, 1998; Robbins et al., 2002; Robyak, Downey, & Ronald, 1979) have demonstrated a link between positive academic behaviors and cumulative GPA, and research suggests that achievement goals and study skills are both connected to college performance outcomes (e.g., Elliot, McGregor, & Gable, 1999; Robbins et al., 2002). The current study examined executive functioning and study habits in freshman college students. Executive functioning will be measured by the Metacognition Index (MI) of the BRIEF-A (Behavior Rating Inventory of Executive Function- Adult Version) which is composed of five scales: Initiate, Working Memory, Plan/Organize, Task Monitor, and Organization of Materials. The PASS (Planning, Attention, Simultaneous, and Successive) subscale of the CAS (Cognitive Assessment System) will be used to measure study habits. Academic performance will be measured using student’s GPA at the end of their first semester and second semesters.
**Student Research Day 2015- Abstracts**

**Tedford Hope, Africana Studies**

Education in the United States and Brazil

Faculty Mentor: M. Keith Claybrook, Africana Studies

This research is a comparative literature analysis on education in the United States and Brazil. I illustrate how education for people of African descent has been transformed through the epochs of pre-colonial, colonial, and contemporary history. In addition, the way that education is utilized to assimilate people of African descent to shift into being reliant on a system that is narrated from a European worldview. It is appropriate to understand how education in the United States and Brazil is an apparatus for keeping people of African descent from reaching a pinnacle in the hierarchical class/ caste system and having any African-centered pedagogy that can thwart the educational system within society. I focus on mental and psychological development of education and how African Americans and Afro Brazilians identify their culture and history from a European worldview. This study also contains theoretical approaches and critical insights on Black Studies endeavors in contemporary times.

**Sage Hubacek, Sociology**

Policing of Protest

Faculty Mentor: Jeb Middlebrook, Sociology

The purpose of this study is to look at the dynamics of the policing of protest, rebellions, and riots and how police brutality take a vital roll in the outcomes of the actions. One way in particular can help express the sounds of prison is through riots, rebellions and activism within prison. These different sounds within the prison would not be as loud without the involvement of police. Many time people see police as a symbol of authority. But when authority takes advantage of the uniform, it turns into something completely different. The policing of different protest can thoroughly affect the way a riot, rebellion, and activism as a whole can turn out. We have seen throughout history in the United States that police brutality has started early, and has not left the justice system. Some main events that have shown police brutality start as early as the Watts Rebellion, to the Los Angeles Uprising, and even to today, the events that have happened in Ferguson Missouri. All events have cases of which where Police not only used police brutality, but racial stereotypes. In all three cases police killed a racial minority, and in all three cases it has caused on uprising. Many times when uprising happen, the policing of the protest have been very involved as well as direct the protest to turn much worse. Both with the Watts Rebellion and the Los Angeles Uprising the communities were outraged at the lack of proper consequences towards the police officers that were involved with the police brutality. The result of these rebellions have supported the concerns across the United States when it comes to the police brutality and having put people in power how still remain to hold oppression ideals towards society and the people they encounter on the job.
Robert Husted, Anthropology

Indigenous American Sustainable Agriculture

Faculty Mentor: Janine Gasco, Anthropology

Throughout human history different farming, agricultural methods, and techniques developed in different parts of the world. Depending on the climate resources available, people adapted to their environment and developed farming techniques to best suit their needs. One method of farming that was developed by Indigenous Americans, most notably the Iroquois League of North America, is known as Three Sisters Farming. Three Sisters Farming is a sustainable companion farming method in which: corn, beans, and squash are all planted within one plot of land so that the three plants (the three sisters) can work to each other’s benefit. The first sister, corn, grows tall and naturally strips the ground of nitrogen. The beans (specifically pole beans) sister number two grow up the corn stalks to provide support for the corn. Also, beans nitrogen fixate to replenish the nitrogen deficient soil. The third sister, squash, has spiny vines and large leaves that provide protection from weeds, rabbits and raccoons that try invading the garden. These three sisters work together to support one another, and the Natives would use raw fish as the initial fertilizer for their gardens. These aspects combine to create a sustainable farming method that I recreated, and documented on my family’s farm during the summer of 2014.

Krystal Huynh, Health Sciences

The Effect of Parenting on Italian Adolescents’ Tobacco Use

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Past studies have shown the effects of parental characteristic on children’s lifestyles and behaviors. Researchers have investigated the influence of parenting on adolescent smoking behavior. This study investigated how certain parenting behaviors such as strictness of family rules, parental control, and parental support correlated with tobacco use in an Italian adolescent population. We hypothesized that stricter rules and low indications of support and control would correlate with higher tobacco use indications in both genders.

Methods: The sample consisted of 301 Italian adolescents, living in the northwest of Italy and was reasonably balanced gender (52% male, 48% female), age (mean age = 17.4 (S.D. = 1.4)). Diverse types of secondary schools participated in the study high educational tracks (25.3%) and schools that focused on technical training (74.7%). Correlation analyses were used between the following variables: parental strictness, strictness inside of the home, strictness outside of the home, parental support, parental control and tobacco use. Analyses were conducted separately by gender.

Results: Results indicated that tobacco use was found to be associated with parental strictness (r= -.22, p< .02), strictness inside of the home (r= -.23, p< .01), parental support (r= -.27, p< .01), parental control (r= -.22, p< .02) among females. No significant associations were found among males.

Conclusions: Finding indicated tobacco use is associated with parental characteristics among females only. Parental strictness, strictness inside of the home, parental support, parental control showed coherence with less smoking. These results highlight the need to consider gender differences when designing adolescents’ smoking prevention programs.
Student Research Day 2015- Abstracts

Saidah Isoke, Sociology

Daddy’s Little Girl: Parenting Behaviors of Black Heterosexual Fathers of Lesbian Women

Faculty Mentor: Jeb Middlebrook, Sociology

Using interviews with 8 Black lesbians about their experiences with race, gender and sexual orientation, as well as their relationship with their fathers, this talk explores the ideas of race, gender and sexual orientation in the Black community. The study will also include interviews with 3 Black heterosexual fathers of lesbian women and will include questions about their perception of gender norms within their race, homophobia, lesbian women, and their initial treatment of their daughter after she disclosed her sexual orientation to him. Through the father-daughter dyad, intersectional aspects of racial, gendered and sexual identity can be examined. The women will be aged 18-27 and will be recruited using a snowball sample throughout the Los Angeles area. This study will benefit multiple marginalized communities (LGBTQIA [lesbian, gay, bisexual, transgender/transsexual, queer/questioning, intersex, asexual] individuals, minorities, and women) by the exploration of multiple sections of identities and experiences.

Jasmine Jackson, CBAPP

Bio-Poem Sam Walton

Faculty Mentor: Gary Polk, CBAPP, Management & Marketing

This assignment asked us to write a Bio-Poem that would encapsulate a successful business man or woman’s managerial essence and traits. As research to better understand the person we were to read an autobiography or biography on this individual to find out the impact he/she had on their company or industry. Once the book was completed we wrote our findings in the form of a 13-line poem and presented it to our classmates. The information included in the poem highlighted a few learning points in our management theory class as well as fun facts about the individual including birthplace, their sibling rank, highest education level if any, University attended, their managerial style, whether they were theory X or Y, their best managerial skill, biggest failure, what I learned from this individual, and why they were special along with a few others points. We were given a list of individuals to choose from or we could pick someone else if the professor approved. I decided to do my research on Samuel Moore Walton the creator of Walmart stores because I noticed how popular Wal-Mart is and I wanted to know the story of the individual that started it all. We were given the opportunity to be creative with our poem. We could present it as a regular poem using the format provided to us by the professor or we could make up our own. Many students decided to talk as if they were the individual using “I am” and others talked about the individual using “who was a” and “whose best”. I decided to speak as myself and Mr. Walton was my close friend that I have known for many years and I am speaking at his funeral about how I remembered him and the memories we shared together.
Student Research Day 2015- Abstracts

Jane Jacobs and Jeffrey Rokkum, Psychology

Multitasking Across Generations

Faculty Mentor: L. Mark Carrier, Psychology

Since the 1990’s psychologists have conducted experiments on the limits of human multitasking, and the nature of how people multitask. These original studies demonstrated that people underwent severe interference when asked to perform two simple tasks at the same time, as long as both tasks required executing an action. This study is a followup to a study performed in 2009 by Dr. L. Mark Carrier. The original study performed by Dr. L Mark Carrier (Carrier, L., Cheever, N., Rosen, L., Benitez, S. and Chang, J., 2009) in 2009 found that there were major differences within the preferences for multitasking and the multitasker’s generation. In addition to the Baby Boomers, Generation Xers and the Net Generation, the iGeneration is included in this new study, since now there is a stark difference between the net generation and the iGeneration. Associated with being from a newer generation comes an increase in available technology, additionally people from the different generations have different preferences for communication, with Net geners using the greatest variety of media to communicate with the world and their friends. Generation-related differences in technology usage exist at home, at school and within the workplace, with some youths being described as “saturated” by technology. The younger generations have reported multitasking is a “way of life” or reported that multitasking is “easy” despite the evidence to difficulties to the contrary. This survey which consists of over 1000 cases has found that the correlation for multitasking preferences between generations has strengthened with the introduction of the iGeneration, and that the iGeneration is the most likely generation to engage in multitasking behaviors across a wide expanse of behaviors measured. The starkest contrast between generations was the multitasking preferences related to smartphones, with baby boomers having a significant negative correlation with any other activity during smartphone usage, and the iGeneration having a significant positive correlation during smartphone usage.

Ray Jaquez, Psychology

Let’s Talk about Sex (ting): An examination of sexting among a diverse sample

Faculty Mentor: Keisha Paxton, Psychology

A behavior increasing in popularity with undergraduate students is sexting. Sexting, for the purposes of this study, was defined as sending a sexually explicit text to someone via mobile phone. This behavior has the potential to be associated with sexual risk behaviors, thus making it necessary to understand its correlating factors, such as the amount of sexual partners. This descriptive study was created in order to explore the prevalence and frequency of sexting. The diverse undergraduate population makes the study ideal for generalizability when analyzing the possible correlating factors of sexting. We thoroughly elaborated on the following descriptors of those who reported sexting: academic level, gender, age, and related behaviors. The data indicated that 62% of the sample population reported sexting. Approximately half of the sample reported the sending of sexually explicit photos of themselves via mobile phone in order to provoke a sexual response. A logistic regression analysis was employed in order to reveal the predictive potential for associated behaviors of sexting. When comparing those who reported sexting to those who reported never sexting, the logistic regression indicated no differences in the following variables: ethnicity, sexual orientation, marital status, academic classification, and gender. A great deal of the research being done on this construct has been based on predominately white populations, limiting the generalizability of the results. The sample for the current study is extremely ethnically diverse, comprised of over 80% people of color. The data suggests that sexting is not limited to specific categories of individuals. While comparing people who sext with those who do not sext, it was revealed that those who reported sexting had fewer sexual partners in the last 12 months. The findings from this study support research suggesting that individuals in committed relationships have the propensity to sext more often.

California State University, Dominguez Hills
Student Research Day 2015- Abstracts

Thalia Jimenez, Biology

The Role of BMP4/SMAD/Dusp9 Signaling in the Self Renewal of Mammary Cancer Stem Cells

Faculty Mentor: Leonardo Martinez, Chemistry

Breast cancer is a complex disease and is the second leading cause of death in women. Breast cancer consists of heterogeneous cell populations where mammary cancer stem cells play key role in both its initiation and progression. The Ras/Raf/MEK/ERK1/2 pathway which is deregulated in breast cancer, promotes aggressive tumor behavior including angiogenesis, epithelial to mesenchymal transition and metastasis. Since targeting Ras or downstream kinases in MAPK pathway has proved ineffective to control breast tumor progression, it is important to examine regulatory mechanisms that influence this pathway. Our laboratory has been studying the role of activated ERK1/2 in breast tumor initiation/progression using xenografts from HMLE HRASV12 breast cancer cell lines. We found that during initial stages (1-2 weeks) of xenograft establishment when its growth rate was small, ERK1/2 remained inactive. However, pERK1/2 levels were found up regulated when tumor mass was rapidly increasing (4-6 weeks). We further found that only one specific MAP kinase phosphatase or dual-specificity phosphatase 9 (dusp9) was up regulated during the initial stages of xenograft formation when pERK1/2 remained inactive. We further found that induction of dusp9 was mediated by BMP4/SMAD family of proteins. It is known that BMP4/SMAD/Dusp9 signaling increase the self-renewal of mouse embryonic stem cells (ESCs). Furthermore, we are examining the role of this pathway in increasing mammary cancer stem cell populations that express ADLH1 and Oct 3/4 during breast tumor initiation. Understanding the role of mammary cancer stem cells in breast tumor initiation may lead to methods of prevention and effective treatments of breast cancer.

California State University, Dominguez Hills
Oliver John Baptiste, Sociology

Socioeconomics and Court-Documented Evictions: Urban Sustainability in a Rentership Society

Faculty Mentor: Matthew Mutchler, Sociology

The following study examines the prevalence of court-documented evictions among rental households living in the California cities of Long Beach and Los Angeles for a minimum of three-years. Over the past decade the rental housing industry has reached unprecedented levels, contributing over $1 trillion to the U.S. economy and growing by over 5 million households since the collapse of the housing bubble in 2006. This growth has been accompanied by rising vacancy rates, increasing rents, and a lack of rental housing affordable to low-income households. Former homeowners turn renters have also increased competition for habitable and affordable housing in many rental markets. Whereas much of the existing research on housing sustainability and evictions focuses on public housing residents and households who receive government aid, such as housing vouchers, this study bring attention to the majority of rental households who do not receive aid and pay market rate rent. The study draws data from 417 renter’s consumer credit reports, such as applicant’s age, race, and gender, level of debt, monthly payments, collections, and other indicators of negative credit, as well as the presence or absence of a court-documented eviction. Results showed a majority of women included in the sample, not unlike the samples found in much literature on housing evictions. Almost a quarter of renters in the sample were former homeowners. Women also demonstrated a higher rate of debt, numbers of collections, and negative lines of credit compared to men. Moreover, non-Latino renters showed higher debt rates, numbers of collections, and negative lines of credit compared to Latino renters. Women reported higher rates of eviction than men, as well as a higher rate of having a second eviction. Moreover, non-Latinos reported a higher rate of court-document evictions on their consumer reports than Latino. Further analyses demonstrated that age, race, and gender were less associated with the presence of a renter having an eviction, than renters with high levels of debt, negative credit, and household expenses documented on their consumer reports.
Nasreen Jokhio, Chanmi Ha, and Rebekka Manzella, Occupational Therapy

The Experiences of Adults Practicing Aikido: An Ethnography

Faculty Mentor: Claudia Peyton, Occupational Therapy

There is a growing need for community-based health and wellness programs for adults that promote productive aging and the prevention of illness. Research is needed to evaluate what people want and determine what their experiences have been with community-based programs, such as Aikido. A qualitative approach was utilized to examine the meaning of participating in Aikido to adults. An ethnographic approach was used to identify a culture-sharing group of adults who practice Aikido to study patterns of behavior, perceptions on Aikido, and its relation to their life satisfaction, occupational engagement, health, and wellness. Through field observations and interviews with 5 participants, the relationship between Aikido and participants’ lives and Aikido’s role in maintenance of their social, environmental, personal, and occupational aspects of their lives can be studied. The participants in this study were 18 years or older and have been practicing Aikido for at least 2 years or more. Themes identified include social awareness, connection to others, dealing with obstacles, physical wellbeing, body awareness, aging, energy conservation, mental wellbeing, self-esteem/self-efficacy, lack of fear, and occupational engagement. These themes are interconnected with the philosophy of occupational therapy practice. Many of the techniques and philosophies of Aikido can be used as a means in occupational therapy to achieve other goals. These results suggest that Aikido practices can be integrated into occupational therapy practice. Aikido can positively affect physical and mental wellbeing as well as a person’s connection to self, other, and their environment. Aikido’s energy conservation and relaxation principles could also potentially benefit both occupational therapists and their clients. Furthermore, through these identified themes, applications for community-based Aikido programs for young adults through older adulthood can be established. Specifically, the philosophy and techniques of Aikido can be used as a practical means to apply the Kawa Model to occupational therapy practice.

Tenille Jones, Business Administration

Dying for Directives: An Analysis of the Organizational Culture and Structure of the Veterans Health Administration

Faculty Mentor: Hugo Asencio, Business Administration

For over two centuries, America has provided medical care and other support to people who have served in the armed forces (Kitzer, K.W., 1999). As the largest integrated healthcare system in the United States, the Veterans Health Administration (VHA) has had many restructuring attempts by the legislature to decrease the scheduling wait times for appointments throughout the organization. However, these restructuring attempts have not been successful over the last 30 years. This project seeks to examine the relationships of executive leaders and staff by evaluating the relationship between organizational structure and culture in the Veterans Health Administration (VHA). More specifically, to understand how VHA operates, the aspects of organizational structure and organizational culture at VHA will be analyzed to answer the research questions: 1) how does hierarchy and organizational structure affect the culture in the VHA; and 2) how does the organizational culture affect employee’s ability to communicate with leaders of the organization? This case study will contribute to the existing bodies of knowledge by analyzing the internal organizational culture in a public organization. This study is grounded in the organizational structure theory, which examine organizational design, as well as the organizational culture theory. This case study will be based on official government reports, congressional hearings, and news reports. The results of this study will seek to provide tools to guide executives in public organizations about the relationship between organizational structure and culture and the unintentional effects on an employee’s performance.
Anthony Jones and Arisdelzy Villanueva, Chemistry and Biochemistry

Molecular Structural Studies of Na2HPO4∙12H2O at Varying Temperatures Using in-Situ Thermo-Raman Spectroscopy

Faculty Mentor: Kenneth Rodriguez, Chemistry and Biochemistry

Raman spectroscopy provides valuable information about the molecular structure by identifying different functional groups and chemical bonds. This study involved the in-situ thermo-Raman spectra of disodium hydrogen phosphate dodecahydrate (Na2HPO4∙12H2O) at temperatures between 25o C-950o C. The goal of this work was to investigate the molecular structural changes and phase transformations of various sodium phosphate species during the heating/cooling processes. Thermo-Raman spectrum of grinded then baked Na2HPO4∙12H2O has been taken at varying temperatures. The heated sample at 950o C was cooled down and the thermo-Raman spectra at varying temperatures were also collected during the cooling process (950o C-32o C). Utilizing thermo-Raman spectroscopy by taking the first derivative of important molecular vibration at changing temperatures could be a new approach for identifying phase transitions in crystalline structures, similar to differential scanning calorimetry (DSC) that is currently used. Additionally, the X-ray diffraction results confirmed the presence of several crystalline structures at different temperature in the heating/cooling processes. The structure of the crystalline phase was observed to yield sodium pyrophosphate with an orthorhombic crystalline structure upon cooling.

Mindee Justesen, Earth Science

“Wildlife Caught by Cat”

Faculty Mentor: Ralph Saunders, Earth Science

WildCare of San Rafael, a state-licensed wild animal hospital in the San Francisco Bay Area, has been treating injured wildlife and teaching the community about human impacts on wild animals for more than 20 years. There has been increased attention nationwide to the effects of predation by domestic cats. As part of a service learning partnership with CSUDH, we are analyzing WildCare's entire intake and release data base to assess impacts of domestic cat predation on wild animals in their service area. Our preliminary analysis has focused on 2013 with secondary attention given to changes in the pattern of animals "caught by cat" (CBC) and brought to WildCare over the past ten-years. In 2013, about 550 animals were "caught by cat" and treated at the hospital. Of the animals treated, 180 were released or reunited. Although many animals come to the hospital with mortal injuries, some are transferred and a very few stay on at Wildcare as educational "ambassadors". We have mapped data for 2004, 2007, 2010 and 2013 seeking patterns that might tell us something about the possible impacts of (1) urban growth, (2) seasonality (rainy season vs dry season), and (3) habitat disruption (such as changes in tree canopy). Our maps are intended to reveal broad trends in where CBC animals are coming from. The maps also allow us to identify clusters that warrant closer attention. We generated maps showing all of the animals released back into the wild. This last map will be printed in a high-resolution poster that we will present, along with our report, to WildCare. The poster – which highlights WildCare's rescue work – will be hung at WildCare's educational facility and will help them draw attention to the effects of domestic cat predation and to lifesaving interventions made by community residents and WildCare hospital workers.
**Student Research Day 2015- Abstracts**

**Keisha Keller, Business Administration**

Oprah Winfrey

Faculty Mentor: Gary Polk, CBAPP Management and Marketing

It was the most creative research project that I’ve done to date. It required putting the successful business life of a phenomenal woman into a rhythmic style of poetry. I chose a very influential woman of our times; talk show host, Oprah Winfrey. The Bio Poem consisted of biographical information collected and fluently weaved into a poetic story. It gave great details on her family background, college education, and her rise to international fame. The Bio Poem presented facts of her authentic managerial style, entrepreneurial characteristics, and interpersonal skills. It gave vivid accounts of her motivational techniques, philanthropic endeavors, and also her setbacks. Oprah rose out of the shame of her past, and became a great humanitarian. I gained great knowledge of her business techniques; that created lasting friendships with prominent people, and mentors. I learned that you can be a successful African American woman without compromising your morals. Oprah Winfrey stayed true to herself, and became the first African American billionaire, owned and produced her shows, and has a Presidential award. She taught me that you have to remain humble, set achievable goals, and be good to your employees so that in turn they will be good to you.

**Caleh Kim, Sasha Lucyga, Sofie Melgoza, Occupational Therapy**

A Narrative Analysis of Women Experiencing Homelessness

Faculty Mentor: Claudia Peyton, Occupational Therapy

This narrative analysis qualitative study explores the stories of nine urban women who are experiencing homelessness. The participants reside in Los Angeles and were capable of discussing their situation. Data were collected using semi-structured interviews that were transcribed verbatim and coded by researchers to determine themes across the dimensions of past, present, and future time. Findings revealed important historic and chronologically situated perspectives regarding the evolving demands of survival on the street for women who are homeless. Stories showed insights into the women’s past which illuminated key factors leading to homelessness, their present conditions of time use, routines, safety, and comradery, and their hopes for the future. Implications for occupational therapy are discussed, which includes community involvement while taking a holistic approach by considering the significant personal, social, and environmental factors revealed in this narrative analysis.
Brandon King and Cindy Nunez, Digital Media Arts

Fatherhood

Faculty Mentor: George Vinovich, Digital Media Arts

The objective of this television public service announcement is to increase awareness of how fathers can be a positive influence in the lives of their children. Co-producers, Cindy Nunez and Brandon King, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-wall, and recording original music) with the goal of inspiring fathers to step up to the plate and take an active role in their child’s life.

Guadalupe Gonzalez, Rita Kirkpatrick, and Jessica Weigel, Anthropology

Differences in Water Usage Based on Ethnicity

Faculty Mentor: Ana Pitchon, Anthropology

This research seeks to examine ethnic differences in attitudes toward water conservation and water consumption practices with a focus on ethnic minority students at California State University, Dominguez Hills (CSUDH). The findings will address culturally appropriate educational approaches to water conservation to increase CSUDH's rating on the Sustainability Tracking, Assessment and Rating System (STARS), a transparent, self-reporting framework for colleges and universities to measure their sustainability performance in multiple areas. CSUDH is an ethnically diverse campus with 58% identifying as Latino, 18% as African-American, and 10% as Asian. A mixed methods approach was utilized, combining both qualitative and quantitative data sequentially. Through preliminary interviews, observations of water usage on campus, and a paper survey that was administered to 91 students, research was conducted to determine if the hypothesis that ethnicity does affect attitudes toward water conservation was true or false. Questions on the survey asked the value placed on water conservation. While most respondents answered with neutral (3), important (4) and very important (5), the numbers varied per ethnicity with the highest at 50% for non-US born Latinos and 17% for White/European. Little variance was found across ethnic groups with respect to water conservation behaviors: turning off the sink while brushing teeth, shorter showers, etc. The results lead to the conclusion that ethnic differences can impact the way that a person views water conservation, but when behaviors were identified as conserving water, there was little difference. The present findings can inform generalized design when planning any educational materials or campaigns regarding reduction in water usage for the campus community.
Student Research Day 2015 - Abstracts

Joel Klingenberg, Negotiation, Conflict Resolution and Peace-building

Marijuana Legalization: California’s Turn

Faculty Mentor: Margaret Manning, Negotiation, Conflict Resolution and Peace-building

June 2011 marked the 40-year anniversary of President Nixon’s declaration of a “war on drugs.” This war has cost about a trillion dollars and has produced little, to no effect on the supply or demand of drugs in the United States. However, what it has accomplished is to make America the number one jailer in the world. The war on drugs has sent millions to jail for low-level offenses, seriously eroded 4th Amendment rights, and cost billions of taxpayer dollars every year. This research examines studies by the American Civil Liberties Union (ACLU), Human Impact Partners, and Law Enforcement Against Prohibition (LEAP), which investigated the negative effects of mass incarceration, particularly among African Americans, caused by the drug war. There has been some progress made to end the drug war in several states. Four states, plus the nation’s capital have legalized recreational marijuana use. In addition, California recently lowered the penalties for drug possession through the passing of Prop. 47 in order to address the over-crowded prisons from continued aggressive enforcement of drug policies. Most marijuana legalization opposition comes from fear of loss of funding from the federal government to local police stations. An in-depth interview with a marijuana activist outlined what the next California proposition for marijuana legalization should cover, for example patient’s rights, employment protection, downgrading from a level 1 drug, and sales tax. By examining the positive effects of legalizing some drug use and treating mental illness as a medical problem and not a criminal one we can make recommendations on the next steps to ending the drug war.

Lindsey Knight, Michael LaPorte, Jayson Binkley, Daniel Canet, Anthony Santos, and Althea Thomas, CBAPP

Improving the Future of California State Dominguez Hills by Increasing Graduation Rates

Faculty Mentor: Cal Caswell, CBAPP

Graduation rates across the nation have generally been dropping, and with 72% of students at California State University Dominguez Hills (CSUDH) not finishing their degrees, something should be done. The purpose of this research is to address the issues hindering students at CSUDH from success in their educational careers. Components addressed include technology, student debt, student involvement, challenges of being a student at a commuter college, and graduation rates. Steps have been taken to improve the accessibility of technology to students, but many of the resources remain outdated, and, in the end, these shortcomings (including missing keyboards) hinder the effectiveness of students’ work. Student debt is a significant issue that contributes to about $1 trillion in the U.S. The realization of student debt can intimidate students and ultimately cause them to stop their pursuit of a degree. Campuses are developing more resources for students to use and become involved in their respective fields. The two biggest issues with respect to involvement are the amount of staff available and getting students to use the resources. As CSUDH is a commuter college, there is a shortage of professors and advisors incorporating their students in campus events. With only two business program advisors and a 2-3 month waiting list for an appointment, students can fall behind and miss necessary classes to graduate on time. Considering how important participation in relative extracurricular activities is when applying for a job, student involvement is not abundant. Graduation rates are low and continue to fall. Of all the CSU campuses, CSUDH is the lowest, with only 28 percent. If the campus can give students access to updated technology, assist with the burden of debt, and raise the involvement of students, the graduation rates will raise.
A news investigation of the Orange County city with the most health code violations

Faculty Mentor: Nancy Cheever, Communications

The purpose of this report was to increase awareness of food handling practices in Santa Ana. From mid-summer to late October 2014 Santa Ana accounted for more than 15% of the total Orange County food establishment violations and imminent hazard suspensions by the health department. This investigative news story examined 34 cities and unincorporated areas over a 10-week period to identify the dangers and effects of foodborne illnesses. The investigation was assigned as a final project in a news gathering and reporting class, in which students were required to look for a problem in their community, investigate and report on it.

There are roughly 48 million cases of foodborne illness annually—the equivalent of 1 in 6 Americans—according to the Food and Drug Administration. Being an Orange County native, the researcher wanted to know how many cities were being inspected and which one had the most restaurant closures. The answers were discovered through in-depth interviews and on the county’s Environment Health website, which provided viable information.

Some of the restaurants on the inspector initiated closures list were first time offenders; others were repeat lawbreakers that already knew the rules. The obligation of any ethical journalist is to be objective to both the restaurants and the public welfare by providing all source and background material: interviewing customers, employees, and a registered environmental health inspector of Orange County. Preventing these illnesses is challenging because resources are limited when relating individual diseases to a particular eating place except during an outbreak. Based on the results of the investigation, more needs to be done in the areas of education, prevention and community awareness when it comes to safely handing food.
Climbing the Social Ladder: How Self-Monitoring Relates to Social Climbing

Faculty Mentor: heather Butler, Psychology

The current study examined whether self-monitoring (high or low) and the target’s education level (associate’s degree or graduate’s degree) impacted the likelihood that individuals would socially climb by choosing to hang out with the target. It was hypothesized that individuals assessed by the standardized Snyder Self-Monitoring Scale (SSMS) who scored high in self-monitoring would socially climb by inviting out the target with a graduate’s degree. Also hypothesized, individuals scoring low in self-monitoring would invite the target out regardless of degree earned. It was finally hypothesized that individuals who scored high on the SSMS would invite the target with a graduate’s degree out regardless of personal differences, where those who scored low on the SSMS would invite the target out based on personal beliefs rather than degree level. A total of 95 participants were recruited from California State University, Dominguez Hills. Nine of the participant’s data were dropped due to failed manipulation checks. Vignettes were utilized to manipulate the target’s education level, and gender was matched to participant in order to strengthen internal validity. The SSMS included 25 true/false questions to determine the participant’s level of self-monitoring. A social climbing scale was devised from the Status Driven Risk-Taking Scale (Ashton et al., 2010) to determine the participant’s motivation to socially climb. ANOVA results showed a significant main effect for self-monitoring, where high self-monitors reported more willingness to socially climb than low self-monitors. A significant main effect for a target’s education level on a participant’s invitation likelihood was found, where targets with an associate’s degree prompted significantly less invitations than targets with a graduate’s degree. Although no interaction was found, these results imply that high self-monitors are better social climbers and regardless of participant’s self-monitoring, participants are more likely to be interested in hanging out one-on-one with target’s holding higher degrees.
Student Research Day 2015- Abstracts

Ariana LeBrun, Sarah Marrich, and Jonathan Moh, Occupational Therapy

Photovoice Exploration: Meaningful Co-Occupations of Parents of Children with Autism Spectrum Disorder

Faculty Mentor: Claudia Peyton, Occupational Therapy

Problem: Current research demonstrates that autism is a rapidly growing issue of concern among families, educators, and health professionals, but there is a lack of research that focuses on co-occupations of parents and children with autism spectrum disorder (ASD). Co-occupations are defined as meaningful activities shared by two or more people. Exploring the variety and complexity of parent-child interactions can help affected families, occupational therapists (OTs), and other people outside the ASD community gain a deeper, more holistic understanding of these relationships.

Participants: Participants included five mothers of children who have had a diagnosis of ASD for at least one year.

Method: Following photovoice methodology, co-researchers documented their participation in meaningful co-occupations with their children through the use of digital photography (Wang & Burris, 1997). During face-to-face, semi-structured interviews, co-researchers contextualized three self-selected photographs via storytelling about the meaning of these images. During the interview process, facilitators engaged coresearchers in dialogue that encouraged reflection on and exploration of salient themes captured through their photographs. Taking an approach grounded in phenomenology, the facilitators then utilized the identified themes to write textural and structural descriptions of co-researchers’ experiences, creating vignettes to accompany the photographs and verbatim narrations (Creswell, 2013).

Findings: Major common themes that emerged included the importance of progress, independence, enjoyment, family connection, and community involvement.

Conclusion: The facilitators believe that the assemblage of photographs, narrations, and vignettes have produced rich and insightful descriptions of co-researchers’ lived experiences.
Student Research Day 2015 - Abstracts

Bryce Leisy, Leslie Estrada, Allana Griffin, Anthropology

Sustainability Tracking, Assessment and Rating System (STARS): Grounds

Faculty Mentor: Ariana Pitchon, Anthropology

Using the Sustainability Tracking, Assessment, and Rating System (STARS), this project assessed the current state of the grounds of CSUDH, looking to improve upon its ecological, cultural, and academic sustainability. Our hypothesis was that installing native plant species will contribute to the sustainability of ecological, cultural, and academic understandings of the California State University Dominguez Hills (CSUDH) campus. Ecological referring to the species of plants used to cover the landscape of this university. Cultural being the preservation of the native people’s beliefs and ways of life who previously occupied this land. Academic in reference to the knowledge attained by individuals who interact with the campus and it’s landscape. Using a mixed-methods approach, we compiled qualitative and quantitative data through observations, archival research, interviews and surveys. We recommend further research into the production of a new landscape approach for CSUDH that would turn the entire campus into a location-specific California native botanical garden. We further recommend establishing signage noting the ethnobotanical relevance of the culturally significant native plants. The new native garden would inform individuals about the people who previously occupied this region and the habitat in which they lived, in addition to promoting ecological sustainability.

Robert Litvinchuk, Annie Chung, DMA

“Pet Adoption”

Faculty Mentor: George Vinovich, DMA

The objective of this television public service announcement is to increase awareness of the need for pet adoption in providing a loving home for a shelter animal. Co-producers, Robert Litvinchuk and Annie Chung, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-walla, and recording original music) with the goal of inspiring people to rescue a shelter animal.

California State University, Dominguez Hills
Heather Luke, HUX

Women’s Liberation in the Seventeenth Century: The Revolutionary Art of Artemisia Gentileschi

Faculty Mentor: Kirstin Ellsworth, HUX

When pondering women’s liberation, generally two time periods come to mind: the early twentieth century with brave suffragists fighting for the right to vote or the 1960’s with women radically fighting for equal rights. It is very doubtful that anyone would associate the seventeenth century with women’s liberation, however Artemisia Gentileschi proved through her artwork that the fight for equal rights is not as recent as people would believe. As a female working in a field reserved for men during the seventeenth century, Artemisia Gentileschi defied all odds and became a successful artist in Europe. Artemisia was a victim of rape, but she did not let this tragedy hinder her from accomplishing her goals. Although unable to physically defend herself against the rape, Artemisia’s depictions of strong confident women emphasize to society that she is not a woman who is defenseless. Artemisia’s choice of the biblical hero Judith as her subject in the 1614- 20 painting Judith Slaying Holofernes depicts her belief that women are not weak and inferior to men. When Holofernes tried to destroy Judith’s home, she overcame all odds to defend herself by executing him even though she was at a physical disadvantage. As a forerunner to women’s rights, Artemisia did not let the fact she was born a woman stop her from achieving success. Artemisia’s Self-portrait as the Allegory of Painting (La Pittura) of 1638 authenticates the fact that she is a confident woman unconcerned with traditional male dominance of her time. By using herself as the subject in the actual act of painting, Artemisia defies the ideals of Western tradition that place males at the top of the hierarchy in society. Far ahead of her time, Artemisia successfully illustrated to future generations that women can do everything a man can do and often even better.

Cassandra Maddox; Edward Toumayan; Craig Hawker

Characterizing the Anti-fouling Ability of Thermally Responsive Polymers

Faculty Mentor: Kenneth R. Rodriguez

Filtration membranes are plagued by fouling, the process of accumulating foulants on a surface, ultimately degrading the membrane over time. Consequently, the development of foulant resistant materials for membranes is in high demand. Polymer films and coatings are commonly used antifouling agents that have a range of chemical properties. Thermally-responsive polymers are an important class of materials that can be used for more effective foulant release applications. These polymer brushes undergo a conformation change from an extended to collapsed state by changing the temperature from below to above the lower critical solution temperature (LCST). Polymer A is a well-documented anti-foulant, however its high LCST is prohibitive for certain applications. Therefore, Polymer B, a copolymer of A with another monomer, was synthesized in order to lower the LCST value. We characterized the fouling release response of two thermally responsive polymers under different pH conditions and temperatures. Using a Quartz Crystal Microbalance with Dissipation, the mass change on polymer-coated sensors was monitored during different fouling conditions. Additional characterization was conducted using fluorescent microscopy; the amount of fouling was estimated by measuring fluorescence intensity before and after inducing a conformation change. The data collected showed that Polymer B has a significantly larger foulant release than Polymer A, an effective 25% foulant release. The ability of Polymer B to undergo this conformational change has proven to be effective in foulant release and with further experimentation this polymer can be optimized to increase fouling resistance.
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Christian Manzo, Oscar Moreno, Kristian Quintanilla, DMA

“Parkour: The Art of Movement”

Faculty Mentor: George Vinovich, DMA

The objective of this television documentary is to explore the mindset, goals and techniques of the new and exciting sport of parkour. Co-producers, Christian Manzo, Oscar Moreno, and Kristian Quintanilla, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and interviewing experts and participants) and finally to post production (video editing, graphics production, and recording of original music) with the goal of giving the audience a glimpse of the up-and-coming sport of parkour.

Christian Manzo, Marvin Reyes, DMA

“Online Predators”

Faculty Mentor: George Vinovich, DMA

The objective of this television public service announcement is to increase awareness of the need for parents to supervise the online activity of their children. Co-producers, Christian Manzo and Marvin Reyes, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-walla, and recording original music) with the goal of warning parents and children about the dangers of online predators because you never really know with whom your children are actually chatting online.
Student Research Day 2015- Abstracts

Ashley Martin, Neika Maryn, Kelsey Nicks, College of Health, Human Services, and Nursing

An Ethnographic Exploration of NextStep Fitness for Spinal Cord Injury Clients

Faculty Mentor: Claudia Peyton, College of Health, Human Services, and Nursing

Individuals with spinal cord injuries (SCI) participate in lesser amounts of physical fitness than their able bodied peers, putting them at risk for cardiovascular disease (Nooijen et al., 2012). Studying why individuals with SCI choose to participate in physical fitness can provide valuable insight into what motivates participants to improve their health. This ethnographic study aims to understand the values, beliefs and meanings of participation in physical activity after a SCI. Semi-structured, in-depth interviews were conducted with seven individuals with a SCI who have been attending NextStep Fitness for a minimum of two months. Investigators also collected observations of NextStep Fitness’s environment. Data analysis consisted of several thorough readings of the interview transcripts, the coding of emerging themes, and the triangulation of emerging themes through member checking. Three overarching themes pertaining to the participants’ experiences emerged from the data: a unique and specialized environment, a sense of belonging, and the cultivation of aspirations. The first describes the specialized equipment provided at this site as well as the expertise knowledge of the trainers. The second illustrates how NextStep Fitness creates a community of equality, acceptance, and relatability for its clients. The third examines the motivation, encouragement, and peer-mentoring observed at this facility. These findings demonstrate the importance of participation in physical activity at a community rehabilitation facility for gains in the physical, psychosocial, and emotional dimensions. The results of this study can be interpreted along the lines of Kielhofner’s open systems cycle.

Brian Martinez, Social Work

Child Abuse and its Relationship to Delinquent Behavior

Faculty Mentor: Elizabeth Barnett, Social Work

Annually there are approximately 700,000 cases of child abuse substantiated in the United States. Of these substantiated cases about 400,000 children are actively being served by the foster care system (HHS.gov, 2014). Research has shown that if a child is in the foster care system they have a higher change of ending up in the juvenile justice system than do their peers (Doyle, Jr., 2008). Crime statistics show that youth under the age of 18 are responsible for 27% of violent crimes and 20% of non-violent crimes (OJJDP.gov, 2014). Since most foster youth have experienced some type of maltreatment, it is important to understand whether this maltreatment is associated with delinquent behavior. This study will examine this relationship with further emphasis on the type of crime, whether nonviolent or violent, and the type of abuse, whether child sexual abuse, general neglect, and physical abuse. Data from the Midwest Study, a longitudinal panel study, will be used for the analyses.
Student Research Day 2015- Abstracts

Odeth A Martinez, Chicana/o Studies and Anthropology

Memorias de Resistencia!: Queer Chicana Voices Challenging the myth of Exceptionality

Faculty Mentor: Corina Benavides Lopez, Chicana/o Studies

Recognizing the importance of lived experience and its connection to education, this research project centers the experiential knowledge of Queer Chicana professors by documenting higher education trajectories via oral history interviews. I argue that counterspaces (Yosso and Benavides Lopez, 2010) allow Queer Chicanas to challenge exclusion and racial microaggressions in order to feel connected to the university. This research also seeks to reach an understanding and provide a critique to the Myth and the politics of Exceptionality (Holguin Cuadraz, 2006). The argument put forth is to be critical of the Myth and the politics of Exceptionality because Latina/o educational achievements are often individualized without taking into account the external forces such as social and racial inequalities that limit educational opportunities (Holguin Cuadraz, 2006). By individualizing the experience of Latinas/os who succeed in education as "exceptional," the burden to excel falls on the individual, which promotes deficit theories of the ethnic group the individual belongs to (Yosso, 2005; Holguin Cuadraz, 2006). Furthermore, I examine how Queer Chicana professors resist educational inequalities in higher education (Delgado, 2013; Yosso, 2005; Solórzano & Delgado Bernal, 2001) by documenting the transformational resistance created by Queer Chicanas in their educational pathways to their professional career.

Nikolae Maynard, Business Administration

Leonard Riggio, the Baron of Books

Faculty Mentor: Gary Polk, CPAPP, Management & Marketing

This research is about the life and management style of Leonard Riggio who created the business known as Barnes & Noble among a few others such as Gamestop and pioneered the device known as Nook. First I researched his history to find what inspired Leonard Riggio to become an entrepreneur then I research everything I can about his management style from how he led his business, any innovations he created, to how he treated his employees. This will be an in depth analysis on the entrepreneurship and management of Leonard Riggio expressing how and why he became very successful. This will be presented as a bio-poem from the perspective of an avid fan going great lengths to prove everyone why Leonard Riggio is a great entrepreneur and why he is Leonard’s number 1 fan. It will be expressed with a great deal of enthusiasm and energy.
Carmen McClain, Human Services

The re-adjustments to civilian life: Ex-veterans and their university experiences.

Faculty Mentor: Phu Phan, Human Services

This research study will contribute to the very limited amount of literature on veterans and their adjustments to receiving an education at the university. This research study will serve as a pilot for a much more comprehensive research project later on. The pilot phase will be the basis for a larger research project on the experiences of veterans receiving a higher education. After conducting the pilot phase, it is hoped that this current research will be able to provide us with a better understanding of how to help veterans succeed at the university.

In the present time, there has been much conflict around the world, more specifically in the United States. Post-deployment many American veterans have found it difficult to readjust back into society. Although, there are service providers such as the VA, many of their needs are not being met. Human Services fields such as Social Work, Occupational and Physical Therapy respond to these needs by providing them with services. Although there has been a wide array of research done on veterans and PTSD there is a limited amount of research done on topics such as veterans successfully readapting back into the community, or their experiences in attending a university.

The purpose of this research is to explore the university experiences of ex-veterans to find out factors that help and/or hinder their ability to successfully complete their degree. The knowledge gained in this study will help increase understanding of what ex-veterans go through as they try to navigate through their university experiences. With the guidance of Dr. Phan, we are currently looking to do in-depth interviews with 30 ex-veterans who are currently attending CSUDH (or another postsecondary institution) to find out about their university experiences.

Chelsea McElwee, Psychology

Parent-Child Communication and Sexual Behavior in Adulthood

Faculty Mentor: Keisha Paxton, Psychology

Lack of parental communication about sex influence a child’s sexual attitudes and behaviors. Sex is considered as a sensitive subject between the caregiver and child. Some parents find this conversation to be difficult to discuss, although it is necessary. The purpose of this study was to examine who spoke to the participant about sex when growing up and determining if that had an influence on their sexual attitudes and behaviors. College students attending a diverse Western university reported their attitudes about their sexual activities on an anonymous online survey. After reading each item on the online survey, participants gave their input. It was hypothesized that Black/African Americans and Hispanic/Latino/a adults would be less likely to be spoken to about sex while growing up by their mother and/or father than Caucasians. Furthermore, it was also hypothesized that women would be less likely to be spoken to about sex when growing up. The findings showed that there were no differences between ethnic groups in terms of who spoke to participants about sex while growing up, but there are gender differences.
Student Research Day 2015- Abstracts

Chelsea McElwee, Walter Lopez, Psychology

English as a Second Language and Performance on Tests of Executive Functioning

Faculty Mentor: Tara Victor, Psychology

In 2011, 44% of Californians spoke a language other than English at home (Ryan, 2013). Research shows bilinguals outperform monolinguals on tasks of executive functioning (Banich, 2004; Bialystok, 2005). Switching between languages is thought to possibly strengthen cognitive flexibility (Bialystok, 2008; Garcia, 2012). We sought to cross-validate these data and hypothesized that individuals for whom English is a second language (ESL) would outperform individuals for whom English is a first language (EFL) on tests of executive functioning. Neurologically and psychologically healthy college undergraduate students were divided into two groups - ESL (n=42) and EFL (n=69). Participants completed a neuropsychological battery that included tests of executive ability (Trail Making Test, Stroop Color-Word Test, and the Controlled Oral Word Association Test – FAS). Groups did not differ significantly with respect to age, education or gender. An independent t-test revealed significant differences in COWAT test performance (ESL< EFL, p =.006). An independent t-test revealed no significant differences in Stroop Color-Word Test (p = .239) and Trail Making Test (p = .09) performance. Results were not in support of our hypothesis. In fact, COWAT performance was significantly different between groups in the unanticipated direction. Some have argued that bilinguals have lower levels of vocabulary than monolinguals by virtue of having to know two languages (Bialystok, et al., 2009; Luo, et al., 2010), which may help explain the difference observed here on a test of verbal fluency. Results will be further discussed in light of the extant literature and directions for future research.

Conor McGarry, Political Science

The Rise of the Cold War Two between the US/NATO powers and the Russia/China partnership

Faculty Mentor: Leopold Lovelace, Political Science

The paper examines the hypothesis that a new type of cold war, or cold war II, is emerging among major powers in the present era that is reshaping the geopolitical map of world politics. While I survey the basic historical background of this new type of conflict, the main objective of the paper is to identify and characterize the main dimensions of this evolving international environment, and some aspects of its potential outlook, specifically focusing on the question whether this new global geopolitical rivalry can be avoided or even whether it should be avoided, or rather the major parties to the conflict are, somewhat inevitably, bound to pursue strategies of conflict with the ultimate aim of prevailing or at least surviving the conflict. The core objective of the paper is, however, to identify the parameters of the conflict, which, in principle, I have anchored into two structural contexts: the context of a reemerging global international rivalry between the Western alliance, on the one hand, and the China-Russia alliance, and in a more extended way the Shanghai Cooperation Organization; and the context of a global transnational conflict --perhaps a global transnational civil war-- where the contours of the rivalries are much more elusive as the conflict cleavages extend across nations, and where the major rivals in the first context may also find points of common interests. I am particularly interested in the question of whether the conflicts can be avoided, and what policy tools and paths of action would the most suitable and potentially effective for such purpose.
Art as a Response to Community Conflict

The topic of my research and reflection is the Del Amo Superfund Site located in an unincorporated area in the County of Los Angeles, just two miles away from CSUDH. The topic assumes that the dumping of toxic chemicals including benzene, chlorobenzene, and dense non-aqueous phase liquid (DNAPL), has negatively affected the community surrounding the area. The broad concept of Industry over Communities is examined by reviewing the photographs of Professor Ellie Zenhari of CSUDH, which includes photographic portraits of the affected area immediately surrounding the superfund site. This research examines artistic responses to the community conflict, such as an affected family that displays a sign outside their home drawing attention to the residual effects of DDT manufacture, and graffiti by the resident gang, Tortilla Flats. The response is a subjective experience and cannot be quantified in terms of data analysis. The overall conclusion of the report is that communities do not have access to the same resources that big industry does, nor does it possess the organizational structure to endure 23 years of corporate delay tactics. The companies that have operated at the Del Amo Site have taken advantage of the unincorporated community dating back to 1943 when they began operations as part of the World War II manufacturing effort. This research implies that there is a definite theme of the needs of those with power being prioritized over the needs of working class communities, as exemplified by the Del Amo Superfund Site and the San Pedro Port. This would have never been countenanced in the adjacent and more affluent city of Torrance.
Student Research Day 2015- Abstracts

**Eric Medina, Biology, Joshua Lozano, Irving Gomez, Psychology**

**Survival of the Formats**

Faculty Mentor: Mark Carrier, Psychology

The shift from using hard copy textbooks to digital textbooks by higher education students is currently taking place. One of the main questions that arises from this change in direction is, are students acquiring less, equal, or higher amounts of cognitive learning using e-textbooks? There are a number of studies that put forth analyzed data comparing the level of cognitive learning obtained by students using traditional versus digital textbooks. The goal of this literature review is to give an assessment of results from previous work done regarding the learning outcomes when comparing the two formats. Studies directed on learning outcomes between the two styles of formats were obtained from scholarly journals. The studies employed have been published and are recognized as contributing factors to the body of research. Each study was read, summarized and compared to one another. The methodology of data collection was carefully analyzed in order for comparison to take place. Also programs used to analyze data, such as web-based questionnaires or the statistical analysis system, were also examined for integrity. Summing up, conclusions from the examined studies conducted on higher education students have resulted in mixed results. While some studies show lower reading and comprehension rates, others present higher perceived and psychomotor learning for e-textbook users. Results vary from decreased, no difference, to increased cognitive learning when using digital against traditional textbooks. Analyzing previous research has shown that the methodology chosen affects outcomes. Also, past research demonstrates that familiarity is a common factor amongst student preference when choosing either style of textbook, and many students may prefer one over the other due to cost. These results suggest that acquaintanceship is a factor in determining a student’s method of study. Thus, student preference, in terms of format, needs to be considered when measuring cognition in future research.
Melissa Merrill, Special Education

What Do You Want? Using Picture Communication Symbols with Bilingual Preschool Aged Children with Special Needs

Faculty Mentor: Anthony Normore, Special Education

This study examined the verbal and nonverbal requesting skills of six children between three- and four- years of age over a twenty-week period. The students had been identified by a school district as having speech impairments and language delays. All of the children were considered English Language Learners. Four of the students were from home environments where only Spanish was spoken. The other two students were exposed to two languages, including English, in their homes. The study involved the use of a communication intervention, Picture Communication Symbols (PCS) with a special education teacher. Parent trainings were provided to allow the students to use the communication intervention at home. This study involved the collection of both quantitative and qualitative data to determine the overall effectiveness of the intervention. The students involved in this study demonstrated gains in using verbal requesting skills both in the classroom and at home. This study is important because only a minimal amount of research focuses on communication interventions for preschool aged children with special needs who are bilingual. Research is currently available on preschool children with special needs, as well as preschool children who are bilingual (Bock et al., 2005; Calculator, 1997; Kaiser & Grim, 2006; Lake & Pappamihiel, 2003; Preis, 2006; Schwartz, Garfinkle, & Bauer, 1998). However, very little research focuses on children with both of these factors. Bilingual children with special needs are part of an ever growing population in the public school system and research is necessary to determine appropriate interventions and supports that aid these students in their learning and overall development.

Justin Mikulich, Business Administration

Steve Wynn

Faculty Mentor: Gary Polk, CBAPP, Management and Marketing

This research is about the casino executive Steve Wynn and his rise to become the most important man in the gaming industry. He has revolutionized the casino industry and his casinos are the current standard of luxury excellence worldwide. Mr. Wynn is most remembered for his various influences on the development of the Las Vegas Strip. He is the creative brain behind the Golden Nugget, The Mirage, Treasure Island, Bellagio, Wynn, and Encore. These successful gaming resorts overshadowed all of his competition and soon all his competitors were scrambling to try and compete with his ideas. He places great trust in traditional values with a new age twist. Mr. Wynn’s resorts are a testament to his dedication to elegance, class, luxury, convenience, and a commitment with providing his players the ultimate gaming experience.

At times Mr. Wynn has come under scrutiny for being involved in illegal activities, although he has never been convicted of any noteworthy crimes. He has been the focus or a played a supporting role, in countless investigations ranging from securities fraud to political bribes. The focus of my research was to ascertain how much of this is true and how much Mr. Wynn has relied on his business intellect. At the conclusion of my research I found Steve Wynn’s success was far from chance. Mr. Wynn made the right moves, at the right time, with the right people. He was carefully groomed for his position by powers within and outside the law since an early age. Mr. Wynn is a visionary surrounded by a group of very powerful friends. Like his meticulous grooming methods, nothing happens in his world by accident.
Human sex trafficking (HST) is the harboring, receiving, recruiting, or transporting of a person for the purposes of coerced or forced participation in prostitution. In the U.S., victims are primarily recruited face-to-face or through online modalities. An increasing amount of cases have been cited in which HST was initiated and occurred in online contexts. Traffickers utilize online chat rooms, online classified advertisements, and social networking sites to aid and assist in the sexual victimization of adolescents. Adolescents and young adults that participate in risky online behaviors, including agreeing to meet people in-person, disclosing personal information, and receiving or sending personal photographs, place themselves at a greater risk of becoming victims of online crimes, such as HST. In addition, individuals that report participating in risky behaviors offline, such as substance abuse and unsafe sex acts, also report higher amounts of the aforementioned online risk behaviors. The purpose of this study was to identify those psychological and social constructs that increase the likelihood of being recruited, trafficked, and victimized via the Internet. To assess the likelihood of online HST victimization, participants (N=168) read a series of vignettes, simulating predatory and non-predatory communication online, and rated how they would likely respond. Participants then completed an online questionnaire that included measures of executive function, family satisfaction, life satisfaction, offline and online risk behaviors, self-esteem, and technology use. This study hypothesized that participants that reported greater difficulty performing executive functions, increased involvement in offline and online risk behaviors, and lower self-esteem would endorse more risky attitudes and behaviors when evaluating the vignettes. Hierarchal multiple regression analysis was conducted to examine the research hypotheses. The results suggest that increased marijuana use, participation in online risk behaviors, and poor self-esteem significantly predict the likelihood of victimization; while executive dysfunction was not shown to predict this outcome.
The Relationship between Technology Use and the Development of Internet addiction: Evidence for the Moderating Effect of Executive Function

Faculty Mentor: Larry Rosen and L. Mark Carrier, Psychology

The increasing popularity of the Internet in the United States and worldwide has produced numerous research studies illuminating the potentially negative or problematic outcomes resulting from overuse. The term Internet Addiction (IA) is widely used to describe a disruptive pattern of problematic outcomes associated with pathological Internet use. The phenomenon is conceptualized as analogous to other behavioral and substance related disorders, and characterized by compulsive and detrimental Internet-related behaviors. The frequency and type of participation in certain technological platforms has been shown to predict the likelihood of IA. For instance, duration of Internet use, participation in online gaming, and use of social applications are associated with IA in adolescents. Similar to other addictive disorders, the findings from neuropsychological studies point to specific physiological processes underlying IA, including deficits in impulse control and impaired performance on decision making and working memory tasks. The present research proposed that the relationship between IA and technology usage is moderated by an individual’s amount of prefrontal cortex control. This study examined the role of executive dysfunction and technology use in determining Internet Addiction among a sample of college students (N=391). The Internet Addiction Test, Media and Technology Usage and Attitudes Scale, and Web Based Executive Function Questionnaire were administered via an online questionnaire. The results of analyses support the research hypotheses, suggesting that there is a significant main effect of both executive dysfunction and media consumption on IA; furthermore an interaction between the two variables was noted (p < .01). Interestingly, individuals that reported experiencing little to no problems performing executive tasks were found to be at greatest risk of developing IA as a function of increased technology use. These results provide further evidence of the relationship between executive dysfunction and the propensity for problematic Internet use.
OBJECTIVE. This study took an in depth look at the lived stories of older adults and volunteerism.

METHOD. Eight participants 65 years old or older, male or female, retired, any ethnicity, and currently volunteering for an agency or independently were recruited for this study. Narrative analysis was used as a qualitative approach to understand the impact volunteering had on older adults. Narrative chronology provided researchers retrospective experiences from participant’s perspectives and meanings they ascribed to volunteering. Each participant was interviewed and interviews were transcribed verbatim. Each interview was then analyzed individually for themes related to participant’s past, present, and future lives using Clandinin and Connelly’s (2000) three-dimensional narrative inquiry space design. Furthermore, within-case analysis was used to analyze each participant then a cross-case analysis was conducted among all interviews to identify common themes.

RESULTS. Volunteering positively impacted older adults by increasing perceived health benefits, giving a sense of fulfillment, and filling a role that work once did by helping others and making a difference in their communities.

CONCLUSION. Findings confirmed that volunteering positively impacted participant’s quality of life.
Laurel Morisaki, Special Education

Best Practices for Teaching Communication Skills to Preschoolers with Downs Syndrome

Faculty Mentor: Caron Mellblom, Special Education

Throughout the educational community it is accepted that in order for students to be successful in school they must have a solid, working communication system. For preschool children with Downs Syndrome both receptive and expressive language skills are delayed. When a young child’s ability to speak is delayed then his ability to access the school environment is also compromised. Although both receptive and expressive language skills are affected, receptive language skills are generally stronger. Therefore the focus of my research will be strategies to increase the expressive language skill base of preschool students with Downs Syndrome. My research will follow the students through their two years of preschool. Prior to the beginning of the study a survey will be given to adults who will be working with the students as research has shown caregive attitude has a direct correlation to student success. The research itself will be broken into three sixty day intervals. During each interval a language baseline will be established and one of the three strategies that research has shown to be most successful: sign language, Augmentative and Alternative devices, and embedded language instruction will be used. At the end of each sixty day interval I will record the gain in language output. At the end of the 180 days, data will be compared to find which if any of the strategies caused an increase in the child’s expressive language base. The second year will follow the student through the school year using the most successful strategy to see if the increase in language continues. This research will continue for at least 2 subsequent groups of students due to the low number of students each new school year.

Malika Morris, Education

Effect of Using Higher-Level Questions to Increase Reading Comprehension and Critical Thinking Skills

Faculty Mentor: April Frykenberg, Education

This study is an analysis and synthesis of the research focusing on the impacts of using higher-level questioning for 4th and 5th grade students to increase comprehension and critical thinking skills that align to Common Core State Standards. Explicit teaching, pre-planned questioning, and differentiated questioning need to be employed in order to foster increased reading comprehension and critical thinking skills. Bloom’s Taxonomy, a cognitive process of learning is primarily used to create the levels of questioning. Educators and researchers assert that Common Core State Standards have affected the effective implementation of instructional strategies. As a result of this shift, researchers have recommended strategies, professional development, and training to prepare teachers to help 4th and 5th grade students meet demands of Common Core State Standards. All of the previously mentioned elements ultimately will increase reading and critical thinking skills. Analysis of the findings suggests that teachers use lower level questioning more frequently than higher-level questioning techniques. Recommendations for future research and implications are included in the research for teachers to examine Bloom’s Taxonomy and the terminology of Common Core Standards, and how they correlate. Teachers will have a better understanding of how to use higher-level questions to enhance their lessons.
Jennifer Moss, Masters of Social Work (MSW)

Social Support, Loneliness, and Spirituality among the Elderly

Faculty Mentor: Elizabeth Barnett, Masters of Social Work (MSW)

The Baby Boomer generation has led to an overwhelming number of elderly individuals in the United States. With more people living longer, the U.S. needs to ensure that research is adequate and up to date regarding the overall well-being so that people can receive adequate and reliable health care geared towards improving longevity of life. The purpose of this research is to address the dearth of research on the interaction between social relationships, emotional and social loneliness, and the role of spirituality among the aging elderly population and to perform an initial assessment of how these characteristics relate to one another. It is hypothesized that people who identify as being religious or having a belief in a higher power show the same health benefits as those that have secure attachments. It is further hypothesized that people who are more spiritual in nature will be less likely to become lonely.

This quantitative study will utilize a cross-sectional design. Upon Institutional Review Board approval, clients were recruited from two different independent living facilities, both of which are located in the city of Long Beach, California. Elderly individuals will be invited to fill out an informed consent form and questionnaire packet geared towards understanding attachment security type, social support, basic demographic information, social and emotional loneliness, and overall spirituality. The survey is comprised of five different scales: The Religious Background and Behavior Questionnaire (RBBQ), the Relationship Scale Questionnaire (RSQ), Quality of Life Index (QLI), the De Jong Gierveld Scale short form, and the Spirituality Questionnaire.
Cayetano Mulato, Sociology

Prep as a tool kit for safe sex and not risk compensation

Faculty Mentor: Jeb Middlebrook, Sociology

The discord of AIDS and HIV haves changed how individuals conceptualize safe sex and sexual health. HIV stands for human immunodeficiency virus. HIV is a virus that can lead to acquired immunodeficiency syndrome, or AIDS. The most common ways HIV is transmitted are: unprotected anal or vaginal sex, breast milk, or sharing drug injection and equipment with a person infected with HIV. Gay, bisexual, and other men, who have sex with men, report for the majority of new infections in the USA. Gay, bisexual, and other men make up 2% of the population in the U.S and are significantly more affected by HIV than any other group in the United States. Therefore, the CDC estimates that 1.1 million individuals in the United States are living with HIV. From the 1.1 million individuals affected by HIV; one in six are, unaware that they are infected. Several variables increase the prevalence of HIV and others STD’s are: poverty, discrimination, stigma, homophobia, rates of incarceration among men, social and socioeconomic, lack of access to medical care and education. In a global effort to decrease the transmission of HIV and AIDS,s current research suggests that PrEP- pre-exposure prophylaxis-, will significantly reduce HIV transmission if taken correctly and immediately before sex. When taken correctly every day PrEP (for at least 30 days before condom less sex), PrEP can be up to 99% effective. Addressing PrEP can alleviate the entropy of HIV and may improve sexual health and decrease homophobia and stigma. The Center for Disease Control (CDC) recommends that sexually active gay and bisexual bi sexual (and heterosexuals) use PrEP if they also report a risk factor for HIV transmission such as condom less sex, a recent STD, or being in a relationship with someone who is living with HIV/AIDS. After decades of sexual trauma, PrE Pep is a source of controversy and conflict due to the fear that it may lead to risk compensation (people using condoms less) or HIV resistance to the medication (if it is not taken properly). Recently the CDC changed unprotected sex to condom less sex to describe intercourse without a condom because, sex without a condom could still be safe if sex is accompanied by proper use of PrEP.. The purpose of this study is to explore and understand PrEP using qualitative data and literature reviews.
Active Hospitality

Jaime Munoz, Philosophy/ Chicano Studies

Hospitality seems to be the general framework of most religions, as the welcoming of the stranger is acquainted to the relationship with the divine. “True hospitality involves openness and transparency and a willingness of both host and guest to reveal themselves.” Hospitality is central to Judeo-Christian beliefs manner because the hospitality does not necessarily mean to assist those on the outside of a physical barrier, but involves those within their jurisdictions who are simply disadvantaged. This paper will examine three ways in which the Jewish scriptures and traditions affirms the practice of hospitality. Rabbi Abraham Joshua Heschel, along with Jewish philosopher Emmanuel Levinas, interprets those texts and traditions within the context of an active hospitality. Howard Thurman, in his book Jesus and the Disinherited, develops the Jewish perspective of hospitality by emphasizing how Christianity presents Jesus Christ as its fulfillment. Both of the religions utilize their beliefs of hospitality to advocate for social justice. Judeo-Christian hospitality actively aims at ushering in a community in which membership is available to all. The Jewish community does this by recreating the difficult times in their celebrations. Christianity embraces underprivileged by worshiping Jesus Christ, the God incarnate in human flesh whom had a low socioeconomic status in his time. When active hospitality becomes a vital aspect of communal life, then in its culmination can show the fulfillment of Judeo-Christian scriptures and traditions, thereby offering a place in which God dwells.

Mukurima Muriuki, NCRP

A study on the role of Kenyans living in Diaspora in expanding governance, cross cultural collaboration and leadership in Kenya.

Faculty Mentor: Nancy Erbe, NCRP

The number of Kenyans living in the Diaspora is estimated at 3 million people and is on the rise. While a lot of attention is focused on the remittances sent by the Diaspora community back home, there is limited focus on other roles Kenyans living abroad can play in nurturing the fortunes of a growing nation as Kenya. This research study focuses on three key areas: Governance, cross cultural collaboration and Leadership. Kenyans living in the diaspora have not been utilized to their full potential by the government of Kenya in terms of skills, expertise and talent attained while in their current country of residence. Likewise Kenyans in the diaspora have not been at the forefront of promoting Kenya’s image in their country of residence. This research is looking to explore ways in which the Kenyan community living abroad can be involved in expanding governance, cross cultural collaboration and leadership in Kenya by tapping into experiences gained in their current country of residence. In addition, this research will focus on ideas and experiences Kenya can learn from the developed world that can help transform the fourth largest economy in sub-Saharan Africa into the greatest nation in the same region.

This research was conducted on 30 Kenyans living abroad. A questionnaire was sent to select individuals. In addition, a survey monkey was posted on social media sites popular with Kenyans living in the Diaspora. The research findings reveal that Kenyans in Diaspora are willing to collaborate with the government in articulating ideas and advancing ideas that will help Kenya grow.
Laura Murphy, NCRP

Power of Personal Practice: 151 Self-portraits and Haikus

Faculty Mentor: Gilah Hirsch, Studio Art

Power of Personal Practice (PPP) is an autoethnographic research project and aesthetic culmination of my undergraduate work, which has been a pathway for self-identification as an artist and peacemaker. My study is inspired by themes such as intersectionality, identity, global citizenship, creative expression, and breaking the cycles of violence. PPP is a 151 day study beginning 11/5/2014 and ending on my 35th birthday, 4/3/2015. The process will include daily renderings of self-portraits and haikus which will map my current healing transformation vis-à-vis the contextual essence of what it means to me to be a member of the culture of Survivors. PPP is also an experiential model of international Restorative Justice which includes research, advocacy, and collaboration with Help A Life (HAL) Foundation in Ethiopia. HAL organizes an academy for 60+ underserved girls who have suffered impoverished living conditions, gender based education inequities, and domestic violence. HAL organized one location where the girls reside and attend school and HAL also provides for each girl’s total needs. I will research the cost of one girl’s livelihood and education and I will raise money to donate to HAL by building a crowdfunding charity website. I will also invite the girls to participate in the creative process with me by rendering their own selfportraits and haikus depicting their experiences, aspirations, and healing processes. Our artistic collaboration will demonstrate bridge and capacity building on an international scale. I will digitally document my 151 Selfportraits and Haikus as well as our collaboration together on my website, conscious-creativity.com. Finally, in this study, I proclaim solidarity with all Survivors healing and moving forward as Self-actualized, empowered individuals who may empower others.

Warren Nanney, Weikang Sun, Chemistry

Optimization of Small-Molecule F6: Fullerene Organic Solar Cells

Faculty Mentor: Kenneth Rodriguez, Chemistry

Organic materials for solar cells are a competitive approach to their inorganic counterparts because of their lower production cost and flexibility in design and synthesis. However because of the difficulty to achieve good crystallinity, organic photovoltaic compounds typically have lower charge mobility and thus require a bulk-heterojunction (BHJ) morphology to efficiently extract charge. The BHJ is a combination of an electron donor and an acceptor compound forming an interlinking bilayer. Due to the nanoscale of the BHJ, direct manipulation is impossible; thus in order to create an optimal BHJ, macro-scale manufacturing methods must be developed. In this paper we optimized the BHJ for organic small molecule F6 and its electron acceptor PC60BM, which required a systematic approach to modify device fabrication parameters and determine ultimate device electrical performance. The optimal blend ratio between F6 and PCBM was found to be 50:50 in both chloroform and chlorobenzene solutions. Optimal concentration of solutions was found with chlorobenzene solutions between 30 mg/ml and 35 mg/ml. Post fabrication annealing was found to consistently increase power-conversion efficiency (PCE) on devices that did not undergo annealing after solution film was deposited. Current testing suggests that annealing time of up to 40 minutes at 100oC on chlorobenzene solutions also increases PCE. These parameters yielded a peak PCE of 3.83%.
Audrey Ngo, Communications

Missing the Point: How Fox News and MSNBC politicize media coverage of the Michael Brown shooting in Ferguson, Missouri

Faculty Mentor: Brant Burkey, Communications

Since the Michael Brown shooting in Ferguson, Missouri on August 9, 2014, racial tension between the police and protesters of Ferguson have run high; prompting national media coverage. The cable news networks, Fox News and MSNBC, have given this event contrasting attention by injecting political agendas into their reports. This study uses textual analysis to deconstruct the way Fox News and MSNBC have portrayed Ferguson police regarding militarization, body cameras, and the impact of announcing the name of Brown’s shooter, Officer Darren Wilson. Six videos, three from each network, covering the same topic were analyzed. The race of guests and hosts were discussed in the analysis as well as the importance of distinguishing hosts on both networks as commentators instead of journalists. Discourse on both networks’ programming in contrast to images and video that were shown in each report was also taken into consideration. Findings indicated that reports on law enforcement in Ferguson were convoluted due to the underlying political agendas of MSNBC and Fox News. By catering to viewers’ conservative (Fox News) and liberal (MSNBC) ideologies, both networks are marginalizing African Americans and propagate the larger, systemic issues of racial, social, and legal inequity in our society. Overall, this study explores both networks’ need to adapt to the demands of a politically divided public, the impact of biased news programming on a marginalized group of people, and the misrepresentation of fact as opinion on a 24-hour news cycle.

Kaitlin O'Brien, Psychology

Frequency of Technology Use and College Students: Examining links to anxiety, self-esteem, loneliness, and life satisfaction

Faculty Mentor: Desirée Crèvecoeur-MacPhail, Social Work

Newer generations have grown up constantly accessing technology. Although useful, possible negative consequences of technology consumption on younger generations are inconclusive. Research hasn’t predicted effects of technology use on an individual’s wellbeing; however, many correlations have been found between increased use and anxiety, self-esteem, loneliness, and life satisfaction. Anxiety levels increase when individuals are denied use of their devices due to nomophobia, the fear of missing information swapping in their social world. This need to stay connected with outside sources is also demonstrated in the increased use of social networking sites (SNS) by college students. Studies found decreased self-esteem levels in college women when using SNS due to more opportunities of comparison. A positive correlation exists between technology use and feelings of loneliness, explaining the use of technology as communication instead of face-to-face interactions. Additionally, studies found a correlation between increased technology use with lower GPA’s, increased anxiety, depression, and loneliness which may lead to lower levels of life satisfaction. As technology becomes increasingly integrated into younger generations’ lives, it is pertinent to study the possible underlying effects on well-being. This study examined the frequency of technology use in addition to college student’s anxiety, self-esteem, loneliness, and life satisfaction for an Advanced Research Methods class. A survey was conducted on a sample of CSUDH students (N=20) using the Media and Technology Usage Attitudes Scale, Rosenberg Self-Esteem Scale, UCLA Loneliness Scale, and Satisfaction with Life Scale. Results are not significant; however, both anxiety and loneliness in the high technology groups are in the predicted direction. Satisfaction with life for the high technology group is not in the predicted direction. Contrary to previous research, college women who used more SNS actually demonstrated higher levels of self-esteem. These results can lead to future studies examining SNS use and self-esteem in college-aged women.

California State University, Dominguez Hills
Differences in Prefrontal Cortex Activation and Executive Functioning Between Low-Tech and High-Tech Users.

This study examines how technology use impacts performance on executive functioning tasks as well as processing in the prefrontal cortex, the site of executive functions including attention, focus, working memory, impulse control and multitasking. Although there is little research directly linking prefrontal cortex activity to technological interaction, there is some speculation that those who are excessive technology users might have difficulty with tasks that require executive functions, particularly those related to attention as technology users have been shown to get easily distracted. Participants were recruited through a screening measure that was distributed to students in three CSUDH courses. As part of that survey, each student completed the Media and Technology Uses and Attitudes Scale—which provided a measure of overall media and technology use—and those scores were used to recruit the top and lowest quartiles of technology users to participate in this study. The 1.5 hour study, included a battery of tasks—using a Latin Square Design—to measure a variety of executive functions including: Automated Operation Span Task, Stroop Test, Scarborough Non-Affective Go/No-Go Task, Wisconsin Card Sorting Task and Tower of Hanoi. During these tasks, participants wore a functional near-infrared spectroscopy (fNIR) device to assess blood oxygen level dependent activation in the prefrontal cortex. The fNIR device is a safe and non-invasive flexible headpiece that is worn by the participant on the forehead that uses both light sources and detectors to measure hemodynamic responses in the prefrontal cortex. Data collection is currently in progress, and this study is the first of its kind to assess whether any differences in executive functioning, measured both by performance and brain activation, exist between low and high technology users. Additional Information: Undergraduate or Graduate
Secondary Analysis of NYTS on adolescent electronic cigarette use

Faculty Mentor: Carl Sneed, Psychology

Electronic cigarettes (e-cigarettes) have become an attractive phenomenon in the world of consumerism, evidenced in the tripling of sales of the product in the United States each year since 2007 (Koch, 2012). The invention of the electronic cigarettes stemmed from an effort to reduce the use of tobacco smoking by individuals. In 2012, 6.7% of middle school and 23.3% of high school students currently used tobacco products, including cigarettes, cigars, hookahs, snus, smokeless tobacco, pipes, bidis, keteks, dissolvable tobacco, and electronic cigarettes. From 2011–2012, electronic cigarette use doubled among middle and high school students, and hookah use increased among high school students. (Center for Disease Control, 2013). The 2011 National Youth Tobacco Survey, a 81-item nationally survey, was used to measure tobacco and electronic cigarette use, attitudes toward smoking, second hand exposure to cigarette smoke, and cessation attempts in children and adolescents (Center for Disease Control, 2014). The subjects of interest were students of the grade level of 6th through 12th (middle school and high school students). Subjects were male and female students classified as non-Hispanic White, non-Hispanic Black, and Hispanic Students, age ranging from 11-18. Participants were students from public, Catholic, and other private middle and high school institutions across the United States. The present secondary analysis will examine gender, age, and race as factors contributing to an individual’s decision to use electronic cigarettes. Statistical analysis will include t-tests and ANOVAs comparing electronic cigarette use of different age groups, genders, and races. We expect gender and age to have significant impact on an individual’s decision to use e-cigarettes.
Vanessa Okonkwo, Negotiation, Conflict Resolution, Peacebuilding

Is the Workers Compensation Process Unfair to Injured Workers in California?

Faculty Mentor: Margaret Manning, Negotiation, Conflict Resolution, Peacebuilding

This paper investigates whether workers compensation process is unfair to injured workers in California, which has the highest incidence of claims in the U.S. Unfairness to workers is an example of structural violence against disadvantaged employees by a system driven by insurance company profits. Two studies were conducted to examine barriers in the workers compensation process. The first study gave self-administered questionnaires to six workers compensation applicant attorneys, who assist injured workers to satisfy claims. The investigation asked for the attorney’s perspective and opinions on the benefits and disadvantages of the process. Almost all of the surveyed attorneys stated that the workers compensation process was in the mid to lower range of fairness, because insurance companies are for-profit corporations that control what, when, and how the injured workers receive medical treatment. In the second study, two applicant workers compensation attorneys handed out self-administered anonymous surveys to five injured workers at the Long Beach California Workers Compensation Appeals Board. All of the injured workers stated that the claim process was either unfair or very unfair, especially by injured workers with claims two years or older. They were frustrated with the length of time their claims had been languishing, the medical treatment process, and the denial of medical treatment. This research also included an interview by attorney Burgis, who pointed out that workers compensation insurance companies backed the passage of California Senate Bill 863, which removed judges from adjudicating independent medical reviews and substituted utilization reviews (URs) by doctors in the employ of the insurance companies. Yet another example of structural violence against injured employees at their most vulnerable time. The lapse of benefits and inability to work has been shown to lead to increased poverty, family discord and homelessness.
Gratitude Measures for Youth

Faculty Mentor: Giacomo Bono, Psychology

Evidence shows that gratitude contributes strongly to youths’ adjustment and well-being. Though research has examined the use of adult measures with youth populations, measures designed for youth are lacking (Froh et al., 2011). Thus, age-appropriate measures for children and adolescents are needed to advance the field. Since parents have a major role in children’s development, they would be good sources for assessing their gratitude too. To fill this empirical gap, this study examines the psychometric properties of 3 new youth gratitude measures: a self-report scale for children, one for adolescents, and a parental-report scale of youths’ gratitude. The aim of this study is to describe these 3 new scales and provide preliminary examination of their reliability and validity.

Currently, data from 68 parent-child dyads have been collected, but data collection is on-going. Parents (M age = 44.84, SD = 3.47) and youth (M age = 11.67 SD = 1.81) completed measures assessing trait gratitude, grateful mood and well-being. Measures of trait gratitude, grateful mood, and well-being were completed by parents, and a child (ages 7-11) or adolescent (ages 12-16) of theirs completed measures of grateful moods and well-being along with the new trait measures examined in this study. These measures were created on the basis of the GQ-6 that was developed for adults (McCullough et al., 2002) and used more appropriate reading levels and formats for these two age groups. Preliminary evidence indicates that grateful parents tend to have grateful children (r = .25, p < .05) and that grateful mood and gratitude in youth are correlated positively (r = .42, p = .05), which demonstrates preliminary construct validity for these new measures. Construct validity will be examined further with confirmatory factor analysis. Criterion validity will also be assessed for each scale by examining the correlations between gratitude and well-being.
Student Research Day 2015- Abstracts

Angela Otterbein, Jane Nelson, Janet O’Neil, Occupational Therapy
The Positive Influences of Having a Sibling with Down syndrome
Faculty Mentor: Claudia Peyton, Occupational Therapy

Down syndrome is one of the most prevalent developmental disabilities in the world; it is therefore vital that occupational therapists have a clear understanding of what life is like for an individual with Down syndrome, as well as what life is like for their siblings, who often take on a caregiving role. Having a clear understanding of the sibling experience will help occupational therapists when communicating and working with these family members. The aim of this study was to create a portrait of the unique skill set gained as a result of having grown up with an individual with Down syndrome. Examining the sibling’s occupational profile as it pertains to their work may provide us with a glimpse into how these individuals may have been influenced by having a sibling with Down syndrome. This study used photo voice research method, a qualitative approach in which photos were analyzed from a phenomenological perspective. Six adult siblings of individuals with Down syndrome were recruited by word of mouth to participate in the study. Participants took photographs that were representative of their work, followed by face-to-face interviews to collect narratives of their experiences. Data analysis and reduction were approached from a phenomenological perspective to provide an “essence” of the lived experience. Common themes emerged from the findings, such as caring and interest about people, the need for personal space or sanctuary, a creative lens for approaching projects, and a desire to “give back” through altruistic endeavors. The findings of this study support occupational therapy’s recent shift toward emphasizing the strengths of individuals with disabilities and the positive influence they have on those around them.

Jorge Paico Jr., Computer Science
Identifying the stigma students face when seeking psychological help
Faculty Mentor: Christopher Potts, English

Using interviews and surveys, this study will explore the degree to which CSUDH students, particularly the Latino population, are reluctant to seek psychological services, and if so, why. The theory behind this concern is that there are certain cultural stigmas from older generations surrounding that same student, unknowingly influencing their life decisions directly in an unsupportive way. This stigma needs to be changed not just within the Latino culture, but all cultures, because at the end of the day, the only one with the power to prevent a suicide attempt is the only person in the room.
Student Research Day 2015- Abstracts

**Cyril Pangan, Charli Harris, DMA**

“It Only Takes a Minute”

Faculty Mentor: George Vinovich, DMA

The objective of this television public service announcement is to increase awareness of the risks of having unprotected sex. Co-producers, Cyril Pangan and Charli Harris, took this project through the entire production cycle: research on the topic, pre-production (script writing, auditioning actors and narrators, location scouting, storyboarding, and creating shot lists) to production (crew assignments, lighting, art direction, camera, and directing the actors) and finally to post production (video editing, graphics production, sound design with ADR, foley and walla-walla, and recording original music) with the goal of warning young lovers about the risks of having unprotected sex.

**Elie Panzalian, Business Entrepreneurship**

Do First Generation College Students make good entrepreneurs?

Faculty Mentor: Tayyeb Shabbir, Accounting & Finance

The purpose of this research is to identify the extent to which first generation students have entrepreneurial traits. Obviously, using received knowledge, the first step is to identify a set of characteristics that correlate with entrepreneurship. Entrepreneurial traits correlate with many factors such as the ability to deal with risks, being results oriented, have energy, a potential for growth, being a team player, have multitasking ability, and ability to deal with risk and uncertainty. He or she is able to make progress towards goals and is able to make decisions when lacking one or several critical resources or data. A survey will be designed and a sample of first generation students at California State University Dominguez Hills will respond to those questions. This will enable us to ascertain the extent of entrepreneurial aspirations and correlation amongst the traits or characteristics of the respondents. This will be one of the few such studies. Given the growing importance of entrepreneurship as an engine for poverty alleviation, economic prosperity and growth this will be an important research endeavor. Entrepreneurs can produce a cascading effect or virtuous circle in the economy, which can cause economic growth. And their innovations may improve our standard of living and provide strength to small business. Again, First generation college students are important because they are considered to be agents of change and improvements in the economic status of families. Results of this study will enable us to devise appropriate public policies to encourage first generation students to consider entrepreneurship careers.
**Student Research Day 2015 - Abstracts**

**Deborah Paramo, Saul Hurtado, and Maria Vargas, Arts & Design**

Surviving by the Hour: The Migration of Unaccompanied Minors

Faculty Mentor: Michelle Burry, Arts & Design

The surge of unaccompanied children crossing the United States border that began in 2011, but hit a crisis point in 2014 will be explored as our topic. An estimated 77,000 children will have been apprehended at the border by the end of 2014. While many of them are able to make it across the border and into shelters, they are usually only allowed a temporary stay. Once their time is up, or after their immigration hearings, they must literally carry their life with them into the unknown world. The design fundraising campaign, Surviving by the Hour was created in an effort to aid them with their journey. All aspects of the design from the original concept to the complex stylistic graphic options will be discussed. The theme of our design fundraising campaign is the backpack. While many shelters provide clothing and rations for these unaccompanied children, they are often struggling with a way to carry their possessions.

A recent United Nations report that interviewed 400 young immigrants points to a difficult and complicated web of reasons for migrating. The reasons include difficulty in escaping gang and societal violence in Honduras, Guatemala and El Salvador as well as dire economic situations.

This fundraising campaign uses design in order to inform others of this terrible crisis and through social media fundraising, funds will be provided to the Sacred Heart Catholic Church in McAllen, Texas, for the purchase of inexpensive backpacks that will help them in their journey.

**Kristina Parel, Sociology**

Injustice Within the Criminal Justice System

Faculty Mentor: Jeb Middlebrook, Sociology

In 1999, Lindon Barrett wrote an interesting article that presented new information to me. The National Institute on Drug Abuse did a study in 1990 that revealed 77% of the 13 million habitual drug users in the United States are white. African Americans only make up 15% of that population, yet they are still four times more likely to be arrested for drug related crimes. If you are an African American living in Pennsylvania, Michigan, Illinois, Florida, Massachusetts or New Jersey you are 7-9 times more likely to be arrested for drug related crimes. I also found it appalling that white drug offenders receive remarkably shorter prison sentences than African Americans. Socialism and Democracy’s online article shows more evidence racial oppression administered by the justice system. The article states that the police target African American drug dealers in inner cities but overlook the white drug dealers in suburban neighborhoods (2012). There has been an overflow of prisoners over the past few decades, mainly because of the United State’s war on drugs. African Americans are constantly being arrested at a higher rate than white people on drug offenses. “According to the US Bureau of Justice Statistics, there’s a 32% chance of a black male born in 2001 will go to jail, while white males only have a 6% chance.” (Quigley 2010). The music produced by this incarcerated population offers and provides narratives of the criminal justice system. The article, “Hip-Hop and Procedural Justice: Hip-Hop Artists’ Perception of Criminal Justice,” by Kevin Steinmetz and Howard Henderson, examines lyrical content analysis. According to Steinmetz and Henderson, “lyrical analysis of a music genre coming from a group so intertwined with the criminal justice system is pertinent” (2012). Themes of unfairness, injustice, oppression and powerlessness reoccurred when studying the lyrics of the randomly selected 200 platinum, hip-hop songs. In Tupac’s, “Thugz Mansion,” he blames politicians for mass incarceration, “I shed tattooed tears and couldn’t sleep good for multiple years. Witness peers catch gunshots, nobody cares. Seen the politicians ban us, they’d rather see us locked in chains, please explain why they can’t stand us. Is there a way for me to change?”

California State University, Dominguez Hills
**Student Research Day 2015- Abstracts**

**Ashley Penaloza-Ramsey, Marley Lisboa, Kristina Larkins, Occupational Therapy**

Experiences of Coping by Parents of Children with Autism

Faculty Mentor: Claudia Peyton, Occupational Therapy

Autism spectrum disorder (ASD), with a 78% increase in prevalence since 2006, is on the rise, and so are the ASD research studies. Although there are many studies about children with ASD, there are relatively few on the parents of children with ASD. The purpose of this study was to explore, through the perspective of occupational therapy, the specific coping mechanisms used by parents while raising their child with ASD. This qualitative study used the transcendental phenomenological approach and semi-structured interviews. The six participants were parents of at least two children: one with ASD and one that is typically developing. Access to participants was gained by fliers and the snowball technique using a known key informant. Common themes emerged in the interviews within the three topic areas of stressors, coping mechanisms, and advice for other parents of a child with ASD. The findings of this study can help occupational therapists better understand and serve their clients in a more holistic, client-centered, and family-centered way.

**Cindy Perez, Child Development**

Potential Aspects of Bilingualism: Advantage on Executive Function

Faculty Mentor: Megumi Kuwabara, Child Development

Populations are becoming more and more diverse each day. Recent studies have shown that bilingual preschoolers and adults seem to have better executive functions (e.g. cognitive flexibilities, such as shifting attentions and solving conflicting cognitive tasks) than monolingual populations because bilinguals must inhibit one of two languages when conversing (Bialystok, 1999). Other studies have shown that bilingual infants show advantages in memory generalization, but not other areas of memory, such as working memory (Brito & Barr, 2012; Brito, Barr, & Grenell, in press). If there are bilingual advantages on executive functions and memory, what aspects of being bilingual facilitate this advantage? No study that we know of has investigated this question. In the present study, we created a Stroop task, which tested association between animals and their natural habitat with congruent (animal matches habitat) and incongruent (animal does not match habitat) conditions. Stroop tasks like this one have been used to test executive functioning differences between bilingual and monolingual populations. Previous research has found that bilinguals show less interference when solving these conflicts (e.g. their reaction time difference between congruent and incongruent tasks is less than in monolingual populations) (Bialystok, 2011). We investigated whether this task would cause any interference. We found that there was a strong association between animal and habitat, causing interference. In this task, our preliminary data did not show bilingual advantages when grouping participants based on knowing one language or two languages. Using the same data, we will analyze possible aspects of bilingualism that may be advantageous to the individuals’ executive function abilities. We specifically will look at variables, such as how long a person has been speaking a second language, the proportion of second language use, and the frequency of alternating between the two languages.

California State University, Dominguez Hills
Kristin Peviani, Psychology

The Facebook Blues: Social Connection or Source of Depression?

Faculty Mentor: Larry Rosen, Psychology

Facebook is the most frequently used social networking site, especially for teens (Pew Internet, 2014). It provides a platform for users to create profiles, maintain broad social networks and express themselves amongst their peers. Many of these activities are innocuous or even beneficial to social development. But results on the interplay of adolescents’ social media usage, self-esteem, sleep, and depression are unclear. Roughly 11% of adolescents experience depression by age 18 (NIH, 2014). Consequently, depression is a major health concern not only because of the toll it takes on socio-emotional development but also because of the negative impact it has on academic performance. Task switching between study content and Facebook interruptions is associated with lower GPA in middle, high school and college students (Rosen, et al., 2013). The combined distraction of Facebook with declining academic motivation could prove especially challenging for depressed individuals. Facebook usage can trigger maladaptive thoughts as well as induce feelings of loneliness (Teppers et al., 2014). It also provides a breeding ground for upward social comparison that may negatively influence self-evaluation (Vogel, et al., 2014). In fact, Facebook users score higher on body image concerns than non-Facebook users (Tiggemann & Slater, 2013) and are more likely to show poorer trait self-esteem (Vogel et al., 2014). These combined benefits and concerns demand greater understanding of the consequences of Facebook usage in adolescents and young adults. The purpose of this study is to identify the self-evaluative qualities, sleep patterns and social media consumption that may increase or decrease an individual’s likelihood of becoming depressed. Data obtained from this study will potentially assist adolescents, parents, and educators in taking informed approaches to social media consumption.
Ngoc Pham, Health Sciences

Possible influence of peer characteristics and stress on teen alcohol

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Previous studies have shown the negative effects of alcohol among adolescents. This study investigated how stress and peer characteristics in teen life correlated with alcohol use. We hypothesized that teens who have higher peer pressure, peer use of alcohol, stress and lower peer support, peer value on school achievement correlated with higher alcohol use. This study investigated these potential associations separately for Dutch and Italian adolescents.

Methods: The sample consisted of 452 European high school adolescents (49% female), ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in the northwest of Italy and in the northeast of Holland. The participants were representative of the population of adolescents attending high school in these parts of Italy and Holland. Correlation analyses were used between the following variables: family stress, social relationship stress, academic stress, peer pressure, peer support and alcohol use. Analyses were conducted separately by country of origin.

Results: Results among Italians showed alcohol use to be correlated with family stress (r= .10, p< .086) and with friend support (r-.11, p<.066). Among the Dutch, alcohol use was associated to school stress (r= -.25, p< .01) and peer pressure (r= .16, p< .062)

Conclusions: Finding indicated clear differences between Dutch and Italian alcohol use. School stress and peer pressure were significantly associated with alcohol use in Dutch adolescents. Prevention efforts should take these differences into consideration when developing program materials.

Zoe Pontius-Courtney, John Ryan, Zoe Walp, and Hilary Zachry, Occupational Therapy

The Meaning of Occupation for Informal Caregivers in End-of-Life Care

Faculty Mentor: Claudia Peyton, Occupational Therapy

It is estimated that 65.7 million Americans act as caregivers for ill or disabled family members (National Alliance for Caregiving, 2009). Approximately 1.5 million individuals receive hospice care in the United States (National Hospice and Palliative Care Organization, 2013). Research indicates that informal family caregivers of dying individuals experience negative physical and mental health outcomes as compared to the general population (Stajduhar et al., 2010). This at-risk population could potentially benefit from occupational therapy services. However, there is a gap in the research in terms of occupations that bring meaning and a sense of well-being to these informal caregivers. This qualitative research study used a phenomenological approach to examine how the meaning of occupation changed through the caregiving experience of informal caregivers. Semi-structured, open-ended interviews were conducted with five selected individuals in California. Data was analyzed via NVivo coding software which produced the following themes: Offering of the Whole Self, Impact on Health or Well-Being, Loss of Occupation, Caregiver Education and Community, Seeking Deeper Meaning, and Escape Through Occupation. These six themes were then elaborated on by describing what participants experienced in the phenomenon being studied. From these themes, a common phenomenon experienced by caregivers emerged. The findings could serve as a guide for occupational therapists as how to effectively enhance a sense of well-being in informal caregivers. Additionally, occupational therapists can provide supportive services and play an advocacy role for informal caregivers who are grappling with the unintended consequences of the role.
Electronic Cigarette Use on Intrapersonal Factors among College Students

Faculty Mentor: Carl Sneed, Psychology

The prevalence and increased use of electronic cigarettes has created debate about what electronic cigarettes are, as well as why they are now so widely utilized. Despite the creation of the first electronic cigarette in 1965, the commercialization of the product in 2004 led to great advances in the development of the product and has contributed to its popularity and use. Since 2007, the sales of electronic cigarettes in the United States have tripled each year. The current study seeks to investigate the impact of electronic cigarette use on the levels of various intrapersonal factors that include emotional intelligence, self-esteem, stress, and hope (measured by the Emotional Intelligence Scale, Rosenberg Self-Esteem Scale, Perceived Stress Scale, and the Adult State Hope Scale, respectively). Research suggests that individuals, specifically young adults, who were former smokers of tobacco cigarettes, experience a higher level of hope compared to both current smokers and non-smokers (Berg, Schauer, Rodgers, & Narula, 2012). Research also suggests that adolescents and young adults with lower self-esteem and higher levels of stress are more likely to smoke than their non-smoker counterparts (Carters & Byrne, 2013). In addition, research continually suggests that higher levels of emotional intelligence (EI) may reduce smoking intentions within young adults who perceived more social consequences associated with smoking. Participants will be asked to fill out a 10-15 minute online survey that will measure the four intrapersonal factors utilizing various appropriate clinical scales. Overall, this study hypothesizes that participants who are current electronic cigarette users or “vapers” will experience higher levels of perceived stress, while also experiencing lower levels of self-esteem, hope, and emotional intelligence than participants who are not electronic cigarette users or “vapers”. Research findings may shed light into what factors lead to electronic cigarette use.
Ashley Potter, Biology

Bleaching and its Effect on the Competitive Interactions of the Symbiotic Cnidarian, Anthopleura elegantissima

Faculty Mentor: Jaqueline Padilla-Gamino, Biology

This study focuses on the intertidal zone and how bleaching from climate change, impacts the intertidal organism Anthopleura elegantissima. Bleaching is a stress response of an organism, like a sea anemone, in which there is an expulsion of algal symbionts from the host organism. This response causes a loss of algal pigment and a whiter appearance. The symbionts are important to the sea anemone because it benefits from the products that the symbionts produce (oxygen and glucose). The sea anemone provides the symbionts with consistent exposure to sunlight and protection from predators. The loss of these symbionts could have major consequences for this organism and other organisms that come in contact with it. Although there are many different causes of bleaching, the one that has resulted in bleaching on a global scale is thermal stress due to fluctuations in sea surface temperatures. Organisms living in the intertidal can experience extreme conditions such as high temperature, desiccation, and exposure to high salinity levels at low tides. To date, it is unclear how organisms in this harsh environment will be able to respond to climate change and what mechanisms will be involved during adaptation. My research work examines the competitive interactions of bleached and unbleached Anthopleura elegantissima side by side on microscope slides to see if there is a difference in the way they compete for space. My results show that there is a difference in the competitive interaction between A. elegantissima with different physiological states (bleached or unbleached). Unbleached specimens tend to be better competitors than bleached specimens. If bleached A. elegantissima cannot compete for resources (space or food), growth and reproduction could be compromised and affect population dynamics with important consequences for the entire intertidal community.

Diego Prechtel, Negotiations, Conflict Resolution, Peace Building

Cante Flamenco: Flamenco Singing as a Form of Trauma Recovery

Faculty Mentor: Manning, Negotiations, Conflict Resolution, Peace Building

Flamenco is a music form attributed to the Gypsy people of the southern region of Spain that grew out of their experience of cultural discrimination and social pain. Flamenco songs are designed to relieve and retain stress, or in Flamenco terms, trauma and recovery. It is a process that is as fundamental as breathing in and out. I personally experienced the relief of trauma and anger through Flamenco singing after a life-threatening automobile accident that required extensive surgeries. As I got better I was able to utilize the Flamenco guitar techniques to rehabilitate my hand that was crushed by the accident. I also used the music to control my emotions when I became frustrated. I realized that this art form, with its deep emotional screams and dark overtones, could help others to recover. As a result, I taught singing classes for the first time. I gave students a pre-training anonymous survey as a baseline and a post-training survey on the last day of the course. Their satisfaction level was very high and exceeded their initial expectations. I observed four students in particular who were impacted by the healing power of singing, for instance one student with Parkinson’s disease was able to control the shaking better when she sang, and another was able to use the dark Seguidillas form of Flamenco singing to mourn the death of her husband. I kept a reflective journal after every session, where I noted that teaching was noticeably different to performing, for example I enjoyed sharing my expertise with others and receiving their love in return, which made my life “feel valuable.” This is another step in my own trauma healing process.
Ayisha Price, Design

Graphic Design and Jobs

Faculty Mentor: John Hsiao, English

The purpose of this research is to prepare graphic designers for future jobs and for the outside world. Graphic design is the art and skill of combining text and visual content for books, magazines, and advertisement. The aspects explored are the main stumbling blocks that design students face, and seek out answers from experts on how those stumbling blocks might be overcome. Also, to identify the primary skills and characteristics employers are looking for in a graphic designer. This has been done through a survey of 250 Cal State Dominguez that are experienced designers who have jobs, and experienced designers who are currently jobless. The survey will cover self efficacy of graphic designers, stagnation of certain design fields, and the manner students found work and how promptly, versus the number of students who are struggling and are not able to find jobs in their desired design field. In addition, I will be interviewing professional graphic designers Jim Keville, Ellie Zenhari, John Pierce, and Michele Bury, and students majoring in graphic design. After examination, I expect experienced designers to know what makes them more prepared, experienced, and employable than other student designers who hope to be graphic designers, as well as what steps they took to be successful, and how they got the job and the level of difficulty. I also expect student graphic designers to not have resources necessary to land a job, and be competitive. Additionally, I expect to get information from the design department and graphic design majors regarding job availability and the processes to take. This research shows that graphic design students are not thoroughly prepared for professional work after graduating college. The opportunities or solutions needed in order to grow those who are unable to find jobs, such as internships, practice clients, and working in the design environment, will be useful for preparation during job search and helping students become more competitive for their design industry. This information will likely impact the attitude of future design students.
Teaching digital storytelling to increase writing scores in physical science.

Faculty Mentor: Leena Furtado, Education

Middle school students are generally disengaged and struggle with writing in science. Various studies have suggested that students’ motivation in learning science increases when actively participating in a task that involves the use of a computer. Research findings explain that digital storytelling encourages students to think deeply about specific topics as they enjoy putting together images and personalizing their assignment. Some topics in physical science can be abstract for middle school students causing lack of motivation. Disengagement in abstract concepts affects students’ ability to demonstrate deep thinking in their writing. Therefore, this study will investigate the effectiveness of using digital storytelling to increase students’ writing scores and motivation in physical science. The participants of this study will consist of a group of 8th grade students of an urban community. Students will receive a pre and post-assessment, which will evaluate their writing scores. As an assessment. Students will write an essay that will be graded based on a rubric. The rubric will include the following criteria; students’ ability to engage reader, accurately depict a concept, essay organization and thought-provoking conclusion. After taking the pre-assessment students will be taught to create a digital story using iMovie. Following the completion of their stories, students will write a second essay, graded with the same rubric. To evaluate students’ motivation in science, students will take a pre and post survey. Findings will demonstrate that students writing scores increase and students are engaged in learning physical science as they actively participate in creating a digital story. Future research can examine motivation in writing when students write and use the digital storytelling application simultaneously.
Student Research Day 2015- Abstracts

Julia Ramirez, Griselda Bernabe, Aaron Street, Emily San Diego, Psychology

Social Comparison and Self-Activation’s Effects on Positive Affect

Faculty Mentor: Steve Frieze, Psychology

Findings from contemporary research suggest that the effects of positive affect are so substantial that they predict a lower rate of mortality in patients with chronic disorders (Moskowitz, Epel, & Acree, 2008). There are several factors that influence the presence of positive affect including social comparisons. The process of social comparison impacts on management of emotions, which can be altered through self-activation (Aspinwall & Taylor, 1993). Self-activation theory posits that activating the self is sufficient to increase social comparison tendencies (Trampe, Stapel, & Siero, 2011). Previous studies have explored the relationship between social comparison and self-activation on a variety of constructs, but little is known about how these two variables interact. This study investigates the influence of social comparison and self-activation on positive affect. A sample of 60 undergraduate students will be randomly assigned to one of six conditions in which they will be exposed to social comparison (upward or downward) and self-activation (positive, negative or control) manipulations. Participants will then complete the Positive and Negative Affect Schedule (Crawford & Henry, 2004) (in order to gauge how the independent variables affected their affect) and the Social Comparison Orientation measure (to assess their tendency to engage in social comparisons). It is hypothesized that participants who are positively self-activated will report more positive affect than those who are negatively self-activated. It is further hypothesized that individuals who are induced to make upward social comparisons will report lower positive affect than those in the downward social comparison condition. Lastly, it is predicted that those participants who are in the positive self-activation and downward social comparison conditions will report the highest positive affect. Understanding how these concepts operate can provide greater insight on how they can be applied to generate positive affect and coping.

Esther Ramirios, Education

Improving the Pre-writing Process for English Language Learners Using Graphic Organizers and Visual Prompts

Faculty Mentor: Leena Furtado, Education

The voluntary adoption of Common Core Standards in Adult Schools has challenged English as a Second Language (ESL) programs, where writing standards have historically aligned with job and career competencies. The new standards focus on building critical thinking and analytic skills rather than competency skills typical for ESL programs to assist with basic life skills. This action research study was designed to investigate the impact of graphic organizers and visual prompts on the pre-writing process of adult ESL students. The research was conducted in the fall of 2014 at an urban Los Angeles Adult School program. The data collection was accomplished using a one group pretest-posttest design in which the intervention was a six-part lesson plan. Pre and posttest scores were compared along with teacher observations and student work. The results indicated that there is a significant correlation between the use of visual writing prompts and graphic organizers, and adult ESL students’ ability to begin the pre-writing process. Furthermore, the teacher observations and student work suggest that there is a need to further investigate whether there is a correlation to language acquisition for adult students’ success in both academic and workforce environments.

California State University, Dominguez Hills
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**Courtney Redfern, Special Education**

Social Skill Interaction and Play-Based Therapy Reduces Aggressive Behavior in Preschool Aged Children

Faculty Mentor: Caron Mellblom-Nishioka, Special Education

The purpose of the study is to confirm that when preschool aged students from 3 to 5 years old with special needs who have received Early Intervention as well as who are in a preschool based program that incorporates play-based therapy are less likely to have perversely aggressive behaviors, than students who have had no prior interventions. The research will take place in a self-contained Special Day Class with four preschoolers with moderate special needs, and have eligibilities of developmental delay and/or autism. The study will be conducted over a twenty 20-week period. Student behavior will be observed four days a week for 2 hours and 25mins. There will be surveys given to parents to see what behaviors parents are struggling with at home and what parent workshops on behavior they are interested in.

- Play-based activities including music and movement
- Sensory-based activities and tactile input
- Non-Preferred Activities and Non-Preferred Activities
- Outdoor activities involving gross motor activities and social play/cooperative play.

This study was designed to see if play-based therapy in a classroom setting decrease aggressive behaviors significantly as they transition to Kindergarten.

**Erika Reynoza, Graphic Design and Studio Art**

Faculty Mentor: Gilah Hirsch, Studio Art

If I am selected to represent for the Student Research Day, I will be discussing my progress as an artist. I will showcase about three of my artworks that are digital, using Adobe software for design and digital photography works. I will also include four other works using mediums that I have used, such as oil paints, graphite and clay works. These were created in CSUDH, and perhaps one or two created at Long Beach City College. Secondly, I plan to use markers that separate my transition from Long Beach City College to CSU Dominguez Hills, including my struggles as an artist and what factors encouraged me to continue my life and work as an artist. As artists and maybe as students, we often question our career choices, I believe that mentioning this briefly will give the audience a better understanding of my artwork and perhaps inspire them to do the same. I was opened to another culture and great classic art during my CSU Summer Arts Program in Florence, Italy. Because of this experience I now desire to travel more, and explore other cultures to expand my art. By showing images of how that trip influenced my artwork, I hope to encourage other students to study abroad. While I have grown tremendously as an artist I will also discuss my end goals and plans for the future.
Lissete Rivera, Esther Espinosa, Anthropology

“Ethnic and Cultural Perceptions in Waste and Recycling in CSUDH.”

Faculty Mentor: Ana Pitchon, Anthropology

This paper attempts to explain the diverse views and attitudes towards recycling between the different ethnic groups represented on the CSUDH campus, including influences, behaviors, and habits of recycling. The study was designed to follow the Sustainability Tracking, Assessment and Rating System (STARS) to evaluate the sustainability area of waste. Using both theory and application, our data were collected from participant observation, surveys, and interviews. Specific focus areas were the perceptions and concerns of the CSUDH population on the topic of waste. We ultimately hope to contribute to an educational initiative for active recyclers and a more sustainable university overall. This research is intended to be a foundation that can be extended to future studies in the area of sustainability and waste as related to ethnic and cultural perceptions.

Mayra Robledo, Ashley Colbern, Kinesiology

The Most Dangerous Sport at CSUDH

Faculty Mentor: Michael Ernst, Kinesiology

Within the past 5 years there has been an increasingly significant interest in sport-related injuries at all levels (e.g., youth, high-school, collegiate, professional). This interest has brought about significant changes in sport rules, equipment and medical treatment and rehabilitation procedures. Even with the advancement of preventive measures and safety regulations in sports, there will continue to be a concern with the high rates of sports related injuries. In order to combat these high injury rates, we need to find out why they are so prevalent and how to mitigate their incidence. Some of the concerns regarding injury prevalence are: (a) are there gaps between treatment protocols and preventive measures? (b) is there a lack of knowledge or consensus among athletes, coaches, and athletic trainers? And/or (c) are some sports just too dangerous? In order to examine these questions there is a need to conduct research on sports related injury incidence. Therefore, with this proposed study we will evaluate the prevalence of sport related injuries at California State University Dominguez Hills (CSUDH). More specifically we will examine the prevalence rate of injuries of nine sports at CSUDH to determine which sports provide the most risk for injury to student/athletes. Focus will be placed on injuries that fall with the following three categories: (a) upper extremity, (b) lower extremity, and (c) concussions. We will gather incidence injury rates between the years 2009 to 2014 from the athletic training department. The data will be categorized by the following variables: (a) gender, (b) age, and (c) sport participation. Examining which sports at CSUDH provide the most risk to student/athletes will provide insight on where the university and more specifically the Athletics Department can focus efforts, education and other similar resources to mitigate and care for these injuries.
Yesiyesa Robledo, Stefanie Thompson, and Albert You, Occupational Therapy

The Lived Experiences of Undocumented College Students

Faculty Mentor: Claudia Peyton, Occupational Therapy

Higher education is often regarded as the great equalizer in American society; it is seen as an instrument that facilitates upward mobility for students that come from working class families. However, for undocumented students, higher education is often unachievable because of state and federal laws and lack of access to federal funding. Despite the obstacles that undocumented students face, some students are able to attain a college degree. The purpose of this case and photovoice study is to describe the lived experiences of undocumented college students. There were six participants, whom were all California residents that were twenty years or older, from multiple ethnicities, and attending and/or attended college. The researchers instructed participants to take photos and videos that represented their experiences as undocumented student. Participants each engaged in semi-structured interviews that were audio recorded and transcribed verbatim. The data from the case studies and the photovoice method was combined and analyzed into overarching themes. These themes included familial and social involvement, personal values and beliefs, finances, and transportation. This research shows a gap in transition services for undocumented students who are planning on attending college. Occupational therapists could help close the gap by contributing to the development of transitional programs for undocumented high school to college students.

Jasmin Rodriguez, Psychology

Examining Cognitive Functioning and Emotion Regulation in Meditators and Non-Meditators

Faculty Mentor: Tara Victor, Psychology

There is an increasing interest in the use of meditation within the Western world as it relates to enhancing cognitive and emotion regulatory abilities. Indeed, practitioners of meditation have been found to score higher on tests of frontal systems functioning (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010) and display greater capacity for emotion regulation (Hill & Updegraff, 2011). Furthermore, there are established neural connections between cognitive and emotional functioning (Davidson, 2003). The proposed study will attempt to cross-validate these differences among meditators and non-meditators. Given that prior research has indicated that meditation, regardless of approach, has been associated with cognitive enhancement (i.e., Grant, Courtemanche, Duerden, Duncan, & Rainville, 2010; Zeidan et al., 2010) the proposed study will extend previous work by including all forms of meditational practice and will examine the effects of multiple forms of meditation on cognition and emotion regulation, which has yet to be done in one study. Specifically, it is predicted that meditators will outperform non-meditators on neuropsychological tests of frontal function (i.e., Controlled Oral Word Association Test, Ruff 2 & 7 Selective Attention Test, Trails Making Test, and the Stroop Test) and report greater emotion regulation capacity on the Difficulties in Emotion Regulation Scale (DERS) compared to their non-meditating counterparts. Expected sample size is 20 participants, (10 meditators and 10 non-meditators). Independent samples t-tests will be used to compare group differences on neuropsychological tests and indicators of emotion regulation.
Katherine Rodriguez, Health Sciences

Parenting and Religiosity on Adolescent Sexual Risky Behaviors

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Studies have indicated an association between family religiosity and adolescent risky sexual behaviors with few investigations testing the influence of the interaction of parenting models with religious instruction on adolescent risky sexual behaviors. This study investigated the concomitant effect of parenting and religious beliefs on adolescent sexual risk indicators. We also tested the potential moderating effect of parenting between the association of religious beliefs and adolescent risk behaviors.

Methods: The sample consisted of 299 Dutch high school adolescents (48% female), ages 15-19 years (mean age = 17.4 (S.D. = 1.4)), living in the northeast of Holland. Multiple linear regressions were used to explore the associations of among religious service attendance, reliance on prayer, belief in god, parental support, parental strictness and two indicators of adolescent sexual risk: number of sexual partners and age of sexual initiation. Age and gender were used as covariates in the analysis.

Results: Our analyses indicated that the predictors explained 68% of the variance (R2 = .69, F (7,13) = 4.110, p<.05). Results indicated that greater number of sexual partners was associated to greater parental support (β = .373, p < 0.05), greater reliance on prayer (β = .902, p < 0.01). Greater indications of belief in god were associated to (β = -.835, p < 0.05) lower number of sexual partners. Lower ages of beginning sexual activity were associated with greater indications of belief in god (β = -.536, p < 0.05). No significant associations were found when testing the potential role of parental support as a moderator.

Conclusions: The positive role of religiosity on risky health behaviors requires further study to uncover processes of influence on adolescent behaviors. While the health benefits of parenting and religious beliefs are known, further investigation is needed to understand how these interact to prevent adolescent sexual risk behaviors.
**Amber Rogers, Communications**

Union Rescue Mission Conditions Research Report

Faculty Mentor: Nancy Cheever, Communications

The past four years have been difficult for downtown Los Angeles shelters that have the responsibility of caring for those who at some point experience a hardship in their life. A lack of funding from the government since 2011 has caused shelters such as the Union Rescue Mission to begin charging admission to those who are unable to maintain a steady income and place to live, as well as cut programs for guests who go there to seek help. The recent gentrification to the Downtown Los Angeles has also contributed to declining conditions of the shelters by forcing many of the long-term residents and businesses in this area to either relocate or shut down completely. This presentation is an overview of an investigative news story on the changing face of Downtown L.A. and its impact on the area’s shelters and homeless population. The research includes in-depth interviews with Linda Wood, Vice President of Finance at The Union Rescue Mission, regarding the effects of the pricing implementations, and Steve Borja, Vice President of Programs, on the changes in the programs provided by the mission. The paper also includes interviews of some of the people who benefit from the resources provided by the mission and how these changes have effected them. Additional information was obtained by researching articles online that dealt with area population, government funding, and shelter services in the Downtown L.A. area through CSUDH’s databases. This presentation will explore such issues as the lack of government funding to shelters, and the restoration of Downtown L.A., which both result in increased homelessness.

**Alena Rose, Computer Science**

All is not Lost, Computer Forensics on a USB

Faculty Mentor: Moshen Beheshti, Computer Science

This project gives an overview of Computer Forensics as well as the process for performing a data acquisition, a brief look into the different types of software tools, and the future of computer forensics. Other types of forensics such as mobile device and cloud computing are also addressed. The process for performing a data acquisition on a mobile device, from the process, various software tools and future of mobile forensics are discussed. A brief overview of cloud computing forensics, as well as a suggested process, along with the future of performing forensics in the cloud is introduced. The necessary advancements to accommodate the rapid technology growth including tablets have been discussed. The history of the Computer Forensics and the USB device has been discussed along with the advancements in technology and capabilities in the various types of the devices and software and also provides information on performing a forensics acquisition on a USB device. At the conclusion of this project, I will perform forensics on a USB drive and a mobile device, utilizing the forensics process and two of the software titles, ProDiscover and EnCase v7, which are mentioned in this report.
Student Research Day 2015- Abstracts

Tammy Ross, Chelsea Pool, Jenna Schumacher, Occupational Therapy

Adult Athletes with Spinal Cord Injuries: A Narrative Analysis

Faculty Mentor: Claudia Peyton, Occupational Therapy

This narrative analysis examines the evolving experiences of adult athletes who have undergone a spinal cord injury (SCI). Their stories depict how they learned to live with a spinal cord injury from the beginning of the injury to the present. The focus was primarily on discovering facilitators influencing athletic engagement, identity adjustment, and relationships during the recovery process for adult athletes with a SCI. Recruitment of six participants was done through cooperation with Next Step Fitness. Participants were required to be over the age of 18 and have incurred a SCI. Data was collected through semi-structured interviews with a small sample size of participants and observations recorded through field notes. To describe chronologically the experiences and processes of change among adult athletes with spinal cord injuries, a narrative approach modeled after Polkinghorne’s (1995) method of narrative analysis was utilized. Based on our findings, common themes were drawn through the participants’ stories and reconstructed through one overarching narrative. These themes were assembled chronologically and included adapting to a new lifestyle, being a member of an adapted gym, and achieving independence. Overall, striving for independence was found to be the main motivator for the individuals in this study. Engaging in athletic activities and continuing their commitment to NextStep Fitness has enhanced their physical, mental, and emotional well-being, which will ultimately enable them to achieve the greatest sense of independence.

Emoni Ruffins, Jeremy Glenn Lopez, Christopher Orciga, Stefanye Walkes, Yadira Gonzalez, Computer Science

Student Loyalty Rewards Program

Faculty Mentor: Antonia Boadi, Computer Science

Guys, is your wallet filled with cards to businesses that offer incentives for using them on purchases? Girls, does your clutch purse seem to be crowded with membership cards that give a point for your dollars spent as being part of a rewards program? Well, the problem with that for our young people is that we don’t have enough space to carry a card for every business that gives discounts for utilizing the services. My research is about how to condense your wallet, and take advantage of a loyalty rewards program that will work with your student ID. In this generation, when you speak to your close friends about what they’ve been up to lately, the answer is almost always the same: “Work/school.” My idea is to promote student life at Dominguez Hills. Advocating the use of one card at multiple businesses and still having the edge of receiving benefits for school products.

The program is comprised of a point system. The research is important because I want to develop a software application that will run this operation. I found out that on our CSUDH campus, we are not utilizing the magnetic stripe on the back of our student IDs. With the use of project management and other available resources such as software engineering, programming, personnel, and funding this will allow me to completely establish a scope that can specify requirements for the software application to be developed. Scoping includes components like labor work, time, cost, and quality of software. What motivates me into research toward this project is having the ability to give back to my community, portraying that I’m a team player, and knowing that I will help people save money. The goal of my research is to have the software application function as a newly developed technology.
Smart use of smart phones? The role of metacognition on university students’ text messaging behavior

Faculty Mentor: Mark Carrier, Larry Rosen, Psychology

Smartphones have opened up a new avenue of digital communication for this generation, and through this new social platform, people have stay connected and up to date with current events. Despite the positive features, there are certain setbacks with this new digital communication. Research has found that 92% of university students text during classroom instruction (Tindell & Bohlander, 2012). Although students do not see phone usage during lecture as harmful, multiple studies show that text messaging during class lecture negatively impacts their academic performance (Rosen, Lim, Carrier, & Cheever, 2011; Barks, Kuznekoff & Titsworth, 2013). For example, Rosen et al. (2011) found that when participants restrained themselves from instantly replying to text messages they received during a video lecture, they performed better on a memory recall test compared to those who immediately responded to the texts. The researchers suggested that those who were better able to regulate their text messaging behavior had higher levels of metacognition. Metacognition is the knowledge and regulation of one’s own cognitive processes (Flavell, 1979). Research on metacognition has shown that metacognitive aware students are more strategic and perform better than their counterparts in academic performance (Pressley & Ghatala, 1990). The present study aims to investigate whether metacognition is a moderator of the impact of text messaging in classrooms. It is hypothesized that those with higher metacognitive skills will restrain themselves from instantly replying to the text messages they receive during a lecture, and as a result will perform significantly better on the memory recall test than those with lower metacognitive skills. The implications of the study will address individual differences in metacognitive abilities within educational contexts and help future research develop new and effective strategies to increase university students’ metacognitive skills.
Abraham Ruiz, Psychology

Digital Metacognition: Assessing the impact of university students’ mobile phone use

Faculty Mentor: L. Mark Carrier, Psychology

Research has shown that today’s university students multitask more than any prior generation, mostly using electronic communication tools such as smartphones (Carrier et al., 2009). Additionally, studies have found that many students text during class (Tindell & Bohlander, 2011). Although students do not see phone usage during class as harmful, studies have shown that text messaging during lecture negatively impacts academic performance (Russell, & Ratwik, 2011). This has been ascribed to poor metacognitive skills. Metacognition is the knowledge and regulation of one’s own cognitive processes (Flavell, 1979). What is not yet known is the level of metacognition today’s university students possess. This study provides a new measure of “digital metacognition” that measures how a student handles his/her mobile phone during a classroom lecture setting. In the first part of the study, a large set of items intended to measure attitudes toward and behaviors regarding classroom device usage were generated by reviewing the scientific literature and by consulting with experts in the field of the psychology of technology. The set of items was administered to a group of 421 university students. After inspecting the scale items through factor analysis, 6 components comprised of 3 attitudinal subscales and 3 behavioral subscales were created. The results demonstrated that the typical student in the sample believed that he/she had the ability to control their focus during lecture, that he/she had strategies to use his/her phone wisely in class, and that he/she tended to appropriately change the settings on the phone during class time. In spite of these positive outcomes, the participants tended not to regularly assess the negative impact of their mobile phone use upon learning. The next step will be to see if these characteristics of “digital metacognition” are associated with classroom learning.

Ashok Sadasivaiah, Keren Shimoni, Raquel Stern, and Kristina Wong, Occupational Therapy

The Meaning of Work for Young Adults with Asperger Syndrome

Faculty Mentor: Claudia Peyton, Occupational Therapy

There exists a profound lack of work participation for young adults with Asperger Syndrome (AS). Little is understood about these individuals’ struggles in work participation and even less has been done to explore and remediate this problem. This qualitative research project aims to explore the meaning of work for these individuals to better inform occupational therapy practice and other professionals who work with this population. This study utilized the qualitative transcendental phenomenological approach, using a semistructured interview method, in which participants were asked questions to explore what work means to them. Through the interview and analysis process, we identified broad themes pertaining to the meaning of work for individuals with Asperger Syndrome. Based on interviews conducted and the integration of textures and structures into meaning, we found a range of experiences, revealing the essence of meaningful and non-meaningful work. Furthermore, we found a gender difference regarding the essence of the meaning of work. For our male participants, the essence of meaningful work was about flexibility, the ability to make decisions, and being able to capitalize on their interests. For our female participants, the essence of meaningful work was about demonstrating competence through helping others and caretaking. This study aims at understanding the essence of work for young adults with Asperger Syndrome. Our findings can be understood through an occupational therapy lens. In facilitating participation in the occupation of work for these young adults, person and environment factors related to the essences may be worth considering in order to meet the unique challenges of this population.
The effects of Parenting on Adolescent Sexual Behaviors

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Hypothesis: This investigation focused on how parenting support and control correlated with adolescent sexual risk behaviors. We hypothesized that parenting that was characterized by higher support and higher control would correlate with less risky sexual behaviors among our adolescent population. We expected to find that these correlations would be stronger among females given the traditional overprotection of females in western societies.

Methods: The sample consisted of 167 Italian high school adolescents (52% female), ages 15-19 years (mean age = 17.6 (S.D. = 1.7)), living in the northwest of Italy. The participants were representative of the population of adolescents attending high school in these parts of Italy. Correlation analyses were used between the following variables: type of relationship between the father, type of relationship between the mother, family strictness inside the home, family strictness outside of the home, strictness of family rules, parental support, parental control, parenting styles and two indicators of sexual risk total number of sexual partners in the last year and total number of sexual encounters. Analyses were conducted separately by gender.

Results: Results among males total number of sexual partners was negatively correlated with strictness of family rules (r= -.33, p< .10), family strictness outside of the home (r= -.34, p< .10) and parental control (r= -.33, p< .05). Number of sexual encounters was positively correlated with more permissive parenting styles (r= .35, p< .05). Surprisingly no significant correlations were found among females.

Conclusions: These findings show that much more research is needed to understand how parenting affects adolescent sexual behaviors especially among females. Possible prevention implications include tailoring parental sexual risk prevention messages differently by gender.
Emily Rose San Diego, Griselda Bernabe, Psychology

Learned Hopefulness: The Effects of Empowerment on Personal Control

Faculty Mentor: Steven Frieze, Psychology

Learned helplessness and learned hopefulness are examined in an effort to understand the effects of psychological empowerment and psychological despair on the perception of personal control and resilience of women who have been exposed to these conceptual models. Learned helplessness describes the circumstance when a person acknowledges that lack of control over the outcomes associated with a given situation (Seligman, 1975). Conversely, learned hopefulness is a process of learning and applying problem-solving skills and the realization of perceived control that eventually leads an individual to develop a sense of psychological empowerment (Zimmerman, 1990). In this research study, the two structural models are examined by stimulating an uncontrollable situation such as a difficult task under a given amount of time. The time given will be purposely insufficient to create an environment where the participant will either perceive their lack of control over a given situation or be induced to feel that they can acquire some power. The task will then be assessed and the subsequent feedback is intended to elicit a psychological empowerment or despair. It is hypothesized that the participants in the learned hopeful condition will perceive greater personal control and experience greater positive affect than in the learned helpless condition. It is further hypothesized that certain populations (women who are victims of domestic violence) who have been exposed to learned helplessness condition for an extensive period of time will not respond affirmatively to either condition or be able to generate much positive affect when subjected to the experimental manipulations. Understanding the potential benefits of the learned hopefulness model will encourage the development of effective treatment interventions and specifically in the case of domestic abuse, and provide new treatment options that can help to overcome the debilitating impact of the abusive syndrome.

Leah Sanchez, Psychology

Deciphering Cahuachi and the Larger Nasca Culture Complex

Faculty Mentor: Jerry Moore, Psychology

This research explores the perceptions of Cahuachi, the largest known Nasca site situated on the South Coast of Peru. The leading discourse on the nature of Cahuachi assumes it was a pilgrimage center that operated between 1 CE - 500 CE. This assumption is largely based on the high presence of temples and mounds, as well as limited evidence of habitation debris. To discern whether there is reasonable doubt about Cahuachi's status as a pilgrimage center this report theorizes that Cahuachi represents a capital in a larger Nasca state. Therefore, this report looks for evidence of an economy, a military and a social/political hierarchy indicative of a state-level society. While craft production and dispersion signify a complex trade economy, trophy heads and burials suggest warfare between small polities rather than a large unified state. Furthermore, examinations of settlement patterns and complex constructions including the unique Nasca puquios are inconclusive as to whether or not Nasca had hierarchical political organization. Ultimately, although evidence is limited, this report shows there is reasonable doubt to suspect that our western perceptions of Cahuachi as a pilgrimage center may need refinement.
Vrej Sarkissian, Business Management

Bio-Poem: John D. Rockefeller

Faculty Mentor: Gary Polk, CBAPP, Management & Marketing

This research presentation is about the life and career of John D. Rockefeller. First research was conducted on his life, and his career. Next The questions that were researched were about his origins, his managerial style, whether he believed in theory x or y, his managerial skill, whom he demanded respect from, what he was committed too, his biggest failure, what he’ll be remembered most for, and what he taught the world. The researched revealed he was born in Richford, New York to a con artist and a homemaker, and was the second of six children. His managerial style is best described as precise and calculated. He was a strong believer of theory x and demanded respect from his employees and colleagues. He was strongly committed to social responsibility giving away nearly half a billion dollars. His biggest failure was the perception the public had of him. He'll be most remembered for being the first billionaire in America, laying down foundations for numerous universities, and helping eradicated hook work and yellow fever. He taught the world that you need to give back in order for society to progress and grow. The research taught me that hard work and persistence are crucial for success. It's possible to go from rags to riches with the right entrepreneurial spirit.

Nalleli Reyes, Sarah Shorb, and Wendy Wang, Occupational Therapy

Civilian Employment among Veterans

Faculty Mentor: Claudia Peyton, Occupational Therapy

Data obtained from the RAND Corporation (2013), details the large scale effort launched by the U.S. military to serve overseas in the Middle East. Between September 2001 and December 2011 over 2 million troops were deployed to Iraq and Afghanistan (RAND Corporation, 2013). Veterans returning home from overseas may encounter complex physical, mental and socioeconomic issues; these are just a fraction of the battles veterans face when attempting to reintegrate back into civilian life. One of the more pertinent challenges many veterans face upon returning home is the attainment of meaningful employment. According to the United States Bureau of Labor Statistics (2014), 722,000 veterans were not employed in 2013, thus this qualitative grounded theory study sought to examine perceived factors influencing unemployment among veterans who served in Operation Iraqi Freedom, Operation Enduring Freedom and Operation New Dawn. The purpose of this research was to develop a theoretical explanation aimed to understand the factors influencing veterans’ abilities to obtain gainful employment. The data analysis included axial coding mechanisms to examine the strategies employed by veterans when seeking employment, as well as the related conditions that may interfere with employment. A total of six male participants and one female participant between the ages of 20-35 were recruited via snowball sampling method. Themes included (a) Securing meaningful employment; (b) Education level (c) Access to social resources; and (d) Mental health issues. Findings highlight the need for further research involving this population and development of a more extensive transition program to aid in veteran employment.
Judgmentalism is related to poor sexual communication between close friends: A research workshop class study of university students

Faculty Mentor: Matthew Mutchler, Sociology, Sociology

Little is known about the relationship between judgmentalism and sexual health communication among friends, although such communication may influence safer sex behaviors. The literature fails to address these topics within peer relationships, particularly among young gay men and their friends. However, we found that the construct of judgmentalism in previous qualitative research was a common theme in sexual communication. Therefore, we collected quantitative data via self-administered surveys among gay identified CSUDH students regarding their level of sexual communication with their closest friend. This study was approved by the CSUDH IRB. We conducted univariate and bivariate analysis using SPSS. We developed these items to measure judgmentalism: “I sometimes leave out details about my sexual experiences when talking with my friend.”, “My friend sometimes calls me a slut or a whore (even as a joke).”, and “My friend has called me stupid or dumb for having sex without a condom.” Sexual communication was measured using adapted standardized items (extent, quality, comfort, and influence). The sub-sample of young gay students was 48 participants. The race/ethnicity of the participant sample was (36.9%) Hispanic, (33.3%) African American, (15.6%) white, (6.7%) Asian-Pacific Islander, (3.7%) Native American, and (5.4%) other. We found that judgmentalism was related to less communication, a lower quality of communication, and less comfort on many of the sexual health topics we measured (P<.05). Addressing judgmentalism in sexual communication between university students and their friends may improve the extent, comfort, and quality of communication, thereby supporting sexual health behaviors such as safer sex.
Health and Cultural Behaviors of West Africans regarding the Ebola virus

Faculty Mentor: Amer El-Ahraf, Health Sciences

The Ebola virus was discovered in 1976 in Central Africa. Since the virus was discovered, thousands of Africans have been hospitalized. As of August 2014, there were 1,200 reported deaths and West Africa has seen its worst Ebola epidemic case yet. Transmission of the Ebola virus has been identified possibly through fruit bats and other animals living in Africa’s tropical environment. There are also other forms of human transmission such as burial rituals, direct care with the infected patient, and living with the infected individual. The Ebola virus is spread through bodily fluids such as blood, urine, sweat, etc. Traditional practices regarding patient care and burial rituals often involve high risk behaviors, such as washing and preparing the body of exposure for several days, during which family and friends pay tribute by stroking or hugging the deceased. For hospitalizations, health workers aren’t properly covered in the personal protective equipment to better assist infected patients and prevent continuous outbreaks. In some cases, PPE gear is not available in health clinics around West Africa. There are some health workers in West Africa who are not thoroughly educated in the Ebola virus and its symptoms. Many health behaviors and cultural practices explain the slow and limited response to outbreaks and the rapid spread of the epidemic that becomes harder to control. As a huge population of people, and the continent where life once began, it saddens me to see that Africans are dying over diseases that could be treated with the right and proper medical support. I want to be an active advocate in providing quality medical attention to Africans. Instead of casting West Africans into a box of uncleanness, I will bring a different perspective on understanding the health behaviors and cultural practices to see how the disease could be better handled.
Patrick St. Julien, Health Sciences

Mapping the relationship of Asian/Pacific Islanders diagnosed with heart disease in relation to household-income in the South Bay of Los Angeles County

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Previous research has shown an association between the prevalence of heart disease in relation to areas with low income. This investigation used geographic information system (GIS) mapping to geographically pin point high rates of heart disease among the Samoan population of the South Bay of Los Angeles County.

Methods: Geographical Information System (GIS), is software used to layer spatial data so that maps of a specific areas may be created. Heart disease data was collected from 2007 Health Surveys Administered by the Los Angeles County of Public Health. The spatial break-up of the data is separated by Health Districts, with a sample of an estimated 578,000 participants; 83,000 of which being Asian/Pacific Islanders. This data was used to determine the location of the majority of Asian Pacific Islanders in Los Angeles County.

Results: Results indicated that areas with a high prevalence of heart disease were associated with a high rate of low income households. This was determined by layering spatial data of Asian/Pacific Islanders diagnosed with heart disease on top of these areas with low income households. I found that health districts such as Long Beach and Carson, who record the highest rates of heart disease, are also linked with low income households, while areas such Rancho Palos Verdes, who indicate lower rates of heart disease, show higher household incomes.

Conclusion: These types of efforts can help health providers gain a better understanding of the health status and income levels of communities in which they work. This understanding can help create interventions targeting these specific areas where higher rates of heart disease is more prevalent, as well as develop strategies to improve the economic status of low income households in these communities.
Voting is one way to influence a community and the issues that affect it, but when voices are not acknowledged, hope diminishes. This hopelessness is derived from several factors. My research used self-administered questionnaires with young Latinos at Santa Ana College, California. Results indicated that the youth and/or their parents were either unable to vote because they are undocumented, or were not motivated to participate in the electoral process because of their lack of faith. This became evident in the city of Santa Ana when 70% of the population was Latino, but only two of the seven city council members represented the Latino community. The overwhelming Latino identity of the community was not recognized when the city council prohibited street vendors from selling goods except in designated downtown areas, outlawed outdoor swap-meets and events that are traditional in the Latino culture. This created a wide gulf and a clash of cultures between the city council and the Latino community. It was not until Democrat Barack Obama ran for the presidential candidacy in 2008 that motivation to participate in voting peaked in the Latino community. In addition to nominating the first African American in the United States as president, Latinos made groundbreaking news nationwide when states like Nevada, Colorado and Florida were represented by Democratic politicians. Even though only eight percent of the Latino population voted, Obama was again supported and won the 2012 re-election. It has become evident that when Latinos participate in the voting process, they can effectively change the political field. As younger generations of Latinos come of age, it is desirable that their attitude towards voting will be more positive and they will aspire to political office to reflect the demographics of their neighborhood.
Student Research Day 2015- Abstracts

Arturo Suarez, Negotiation, Peacekeeping and Conflict Resolution

The Force of the Latino Vote in Santa Ana, CA

Faculty Mentor: Margaret Manning, Peacekeeping and Conflict Resolution

Voting is one way to influence a community and the issues that affect it, but when voices are not acknowledged, hope diminishes. This hopelessness is derived from several factors. My research used self-administered questionnaires with young Latinos at Santa Ana College, California. Results indicated that the youth and/or their parents were either unable to vote because they are undocumented, or were not motivated to participate in the electoral process because of their lack of faith. This became evident in the city of Santa Ana when 70% of the population was Latino, but only two of the seven city council members represented the Latino community. The overwhelming Latino identity of the community was not recognized when the city council prohibited street vendors from selling goods except in designated downtown areas, outlawed outdoor swap-meets and events that are traditional in the Latino culture. This created a wide gulf and a clash of cultures between the city council and the Latino community.

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Setu Taase, Computer Science

Data Preservation in Sensor Networks with Spatial Correlation

Faculty Mentor: Bin Tang, Computer Science

The amounts of property that we store on our devices, as well as the information we send and receive are becoming increasingly more valuable and exponentially massive. As the amount of information increases, so too has this information increased in desirability to the likes of thieves and hackers. Imagine you can use a personalized beat or rhythm, if you may, as a login code to gain access to not only emails and membership login, but also and more specifically to your devices (i.e. phone, tablet, computer, game console). My project will utilize a number of personal algorithms designed to give the user the power to do exactly that. With this technology, a user will be able to set and use a rhythm that is based on a key-array, which is formed as the user synchronizes a tap rhythm to a series of beats on a screen. Each set of beats will be run by a Thread and each keyed-in beat will symbolize an ID in the key-array. This method can be used singularly with a long rhythm, or coupled with another code (password) as a simple rhythm.

California State University, Dominguez Hills
**Student Research Day 2015- Abstracts**

**Setu Taase, Computer Science**

Keystroke Rhythm Detection with Graphics Aid

Faculty Mentor: Mohsen Beheshti, Computer Science

The amounts of property that we store on our devices, as well as the information we send and receive are becoming increasingly more valuable and exponentially massive. As the amount of information increases, so too has this information increased in desirability to the likes of thieves and hackers. Imagine you can use a personalized beat or rhythm, if you may, as a login code to gain access to not only emails and membership login, but also and more specifically to your devices (i.e. phone, tablet, computer, game console). My project will utilize a number of personal algorithms designed to give the user the power to do exactly that. With this technology, a user will be able to set and use a rhythm that is based on a key-array, which is formed as the user synchronizes a tap rhythm to a series of beats on a screen. Each set of beats will be run by a Thread and each keyed-in beat will symbolize an ID in the key-array. This method can be used singularly with a long rhythm, or coupled with another code (password) as a simple rhythm.

**Rosalie Tallud, Computer Science**

A Centralized Database System for Automating Event Enrollment

In many traditional enterprises, there is still a dependency on a centralized database that contains employee information based on badge number. This database implemented is to be used for badge scans to get into certain buildings and to gather attendance information from events. There are hundreds of local copies of this database stored on multiple systems leading to unreliability and inconsistency among badge scans. These inadequacies can be solved using a centralized database system in which local data can be shared across the company via Local Area Network (LAN) and conveniently downloaded on demand. Implementation of this centralized system will involve creating an agent that communicates between the central database stored on a network and front-end badging interface, which should also allow users to save the most recent version of the central database as well as save and export attendance information.
**Student Research Day 2015- Abstracts**

**Teresa Tatenco, Art and design, studio art option**

Casting the Devil into Hell: Good vs. Evil in Ceramic Sculpture

Faculty Mentor: Jim Keville, Art and Design, Studio Art option

Creating ceramic sculptures using the extensive collection of ceramic molds in the studio is focus of my creative research which expanded to artistic ideas about good and evil. By using disparate imagery and emotions to create a unique Baroque inspired sculpture I was able to explore different styles and figurative elements. My first sculpture was a 3D version of Botticelli’s painting, "The Birth of Venus." By mixing fine art with mass produced figurines, I designed my sculpture with a Renaissance baroque style and instinctively I knew I had to enhance the delicate curves. In that moment I envisioned endless possibilities using my imagination. I did not realize that my use of diverse ceramic molds would be the beginning of the exploration into my strict catholic upbringing and my research into the ideas of good vs evil. I continue to explore and analyze/illustrate these ideas by recreating a childhood nightmare. In the nightmare I was in my childhood bedroom and I was confronted by the devil himself. The sculpture I created from this experience was titled, "Saint Michael casting the Devil into Hell," which was inspired by a work of art on my visit to Los Angeles County Museum of Art. In my sculpture I used the most unique molds, for example the fin of a koi fish would be the wings of the devil and the trunk of a elephant was one of the devil’s horns. I incorporated at least seven different molds. Once the construction process was done I decided to paint it with underglaze colors. I chose to use purple for Saint Michaels clothing which represents royalty, and is an important symbolic color in the Catholic religion. As the story of the devil falling out of favor with the Lord was cast out of heaven and into hell goes, I chose to paint the devil with the idea of him losing his pure white body and as he was pushed down from the clouds into hell. The parts of him which were closer to heaven were pure white and the part of the body which was closer to hell began to turn dark and red as if a terminal disease overpowered his body and rapidly replaced the white into black. I emphasized this especially in the devil’s wings. The color white starts to fade and turn to yellow, orange and into blood red. By exploring these ideas of good and evil through form and imagery I continue to delve into the creative process.
Melody Thiessen, Psychology

Charting the Course Between Adaptive and Toxic Stress

Faculty Mentor: Steven Frieze, Psychology

Stress affects all of us, such that, every year, since 2007, the American Psychological Association has conducted a Stress in America™ survey. The deleterious effects of stress have been widely studied in medicine and psychology, notably since the 1980s with Janice Kiecolt-Glaser and Ronald Glaser’s findings that infection rates soared in medical schools during exam time. However, researchers such as B. P. Dohrenwend and Hans Selye noted that some stress can be adaptive, serving to increase immune and cognitive function in the short term. The gap in the literature exists between the idea of stress as helpful (adaptive stress) and stress as harmful (toxic stress); particularly, at what point adaptive becomes toxic. This research seeks to gain insight by examining a more complete picture of participants’ lives, through an investigation of factors that have not typically been addressed in stress related surveys. The comprehensive instrument employed in this research will include items that examine perceived stress versus actual workload and explore factors that are associated with resiliency such Martin Seligman’s five point model of wellbeing, PERMA (positive emotions, engagement, relationships, meaning, and accomplishment). It is hypothesized that the consequences of toxic stress are related to a lack of balancing factors, which explains why some people thrive under high levels of stress, while others become unable to function. By closely examining stress as part of individuals’ whole being, this study will shed light on factors that can help people use their stress to thrive, rather than fall victim to its toxic effects.

Stephanie Thomas, Education

The Effect of Using Graphic Organizers to Help Students Understand the Relationship between Claim, Evidence and Reason in an Argumentative Essay

The essential elements of an argumentative essay include understanding the dynamic relationship between making a claim that is supported by relevant evidence and sound, logical reasoning. The demand on high school students to master this style of writing has increased and students need explicit instruction to understand these relationships. This paper explores the effect of using graphic organizers in the prewriting process to ensure that students grasp the relationship between claim, evidence, and reason. Minimal research has shown that students make significant gains in formulating their argument when direct instruction is provided.
Student Research Day 2015- Abstracts

Brittany Tillman, Biology

The inflammasome in alcoholic hepatitis: Its relationship with Mallory–Denk body formation

Faculty Mentor: Thomas Landefeld, Biology

Recent studies indicate that the inflammasome activation plays important roles in the pathogenesis of alcoholic hepatitis (AH). Nod-like receptor protein 3 (NLRP3) is a key component of the macromolecular complex that is so called the inflammasome that triggers caspase 1-dependent maturation of the precursors of IL-1β and IL-18 cytokines. It is also known that the adaptor proteins including apoptosis-associated speck-like protein containing CARD (ASC) and the mitochondrial antiviral signaling protein (MAVS) are necessary for NLRP3-dependent inflammasome function. Steatohepatitis frequently includes Mallory–Denk body (MDB) formation. In the case of alcoholic steatohepatitis, MDB formation occurs in 80% of biopsies (French 1981; French 1981). While previous studies have focused on in vitro cell lines and mouse models, we are the first group to investigate inflammasome activation in AH liver biopsy specimen and correlate it with MDB formation. Expression of NOD1, NLRP3, ASC, NAIP, MAVS, caspase 1, IL-1β, IL-18, and other inflammatory components including IL-6, IL-10, TNF-α, IFN-γ, STAT3, and p65 was measured in three to eight formalin-fixed paraffin-embedded AH specimens and control normal liver specimens by immunofluorescence staining and quantified by immunofluorescence intensity. The specimens were double stained with ubiquitin to demonstrate the relationship between inflammasome activation and MDB formation. MAVS, caspase1, IL-18, and TNF-α showed increases in expression in AH compared to the controls (p < 0.05), and NAIP expression markedly increased in AH compared to the controls (p < 0.01). There was a trend that levels of NLRP3, ASC, caspase1, IL-18, IL-10, and p65 expression correlated with the number of MDBs found in the same field of measurement (correlation coefficients were between 0.62 and 0.93, p < 0.05). Our results demonstrate the activation of the inflammasome in AH and suggest that MDB could be an indicator of the extent of inflammasome activation.
Brittany Tillman, Biology

Mallory-Denk Body (MDB) formation modulates ufmylation expression epigenetically in alcoholic hepatitis (AH) and nonalcoholic steatohepatitis (NASH)

Promoter CpG island hypermethylation is an important mechanism for inactivating key cellular enzymes that mediate epigenetic processes in hepatitis-related hepatocellular carcinoma (HCC). The ubiquitin-fold modifier 1 (Ufm1) conjugation pathway (Ufmylation) plays an essential role in protein degradation, protein quality control and signal transduction. Previous studies showed that the Ufmylation pathway was downregulated in alcoholic hepatitis (AH), nonalcoholic steatohepatitis (NASH) and in mice fed DDC, resulting in the formation of Mallory-Denk Bodies (MDBs). In this study, we further discovered that betaine, a methyl donor, fed together with DDC significantly prevents the increased expression of Ufmylation in drug-primed mice fed DDC. Betaine significantly prevented transcript silencing of Ufm1, Uba5 and UFSP1 where MDBs developed and also prevented the increased expression of FAT10 and LMP7 caused by DDC re-fed mice. Similar downregulation of Ufmylation was observed in multiple AH and NASH biopsies which had formed MDBs. The DNA methylation levels of Ufm1, Ufc1 and UFSP1 in the promoter CpG region were significantly increased both in AH and NASH patients compared to normal subjects. DNA (cytosine-5-)-methyltransferase 1 (DNMT1) and DNA (cytosine-5-) methyltransferase 3 beta (DNMT3B) mRNA levels were markedly upregulated in AH and NASH patients, implying that the maintenance of Ufmylation methylation might be mediated by DNMT1 and DNMT3B together. These data show that MDB formation results from Ufmylation expression epigenetically in AH and NASH patients. Promoter CpG methylation may be a major mechanism silencing Ufmylation expression.

Brittany Tillman, Biology

TLR3/4 signaling is mediated via the NFκB-CXCR4/7 pathway in human alcoholic hepatitis and non-alcoholic steatohepatitis which formed Mallory-Denk bodies

Activation of Toll-like receptor (TLR) signaling which stimulates inflammatory and proliferative pathways is the key element in the pathogenesis of Mallory-Denk bodies (MDBs) in mice fed DDC. However, little is known as to how TLR signaling is regulated in MDB formation during chronic liver disease development. The first systematic study of TLR signaling pathway transcript regulation in human archived formalin-fixed, paraffin-embedded (FFPE) liver biopsies with MDB formation is presented here. When compared to the activation of Toll-like signaling in alcoholic hepatitis (AH) and non-alcoholic steatohepatitis (NASH) patients, striking similarities and obvious differences were observed. Similar TLRs (TLR3 and TLR4, etc.), TLR downstream adaptors (MyD88 and TRIF, etc.) and transcript factors (NFkB and IRF7, etc.) were all upregulated in the patients' livers. MyD88, TLR3 and TLR4 were significantly induced in the livers of AH and NASH compared to normal subjects, while TRIF and IRF7 mRNA were only slightly upregulated in AH patients. This is a different pathway from the induction of the TLR4-MyD88-independent pathway in the AH and NASH patients with MDBs present. Importantly, chemokine receptor 4 and 7 (CXCR4/7) mRNAs were found to be induced in the patients livers in FAT10 positive hepatocytes. The CXCR7 pathway was significantly upregulated in patients with AH and the CXCR4 was markedly upregulated in patients with NASH, indicating that CXCR4/7 is crucial in liver MDB formation. This data constitutes the first demonstration of the upregulation of the MyD88-dependent TLR4/NFkB pathway in AH and NASH where MDBs formed, via the NFkB-CXCR4/7 pathway, and provides further insight into the mechanism of MDB formation in human liver diseases.

California State University, Dominguez Hills
Brittany Tillman, Biology

Increased activity of the complement system in the liver of patients with alcoholic hepatitis.

Faculty Mentor: Thomas Landefeld, Biology

Inflammation has been suggested as a mechanism underlying the development of alcoholic hepatitis (AH). The activation of the complement system plays an important role in inflammation. Although it has been shown that ethanol-induced activation of the complement system contributes to the pathophysiology of ethanol-induced liver injury in mice, whether ethanol consumption activates the complement system in the human liver has not been investigated. Using antibodies against C1q, C3, and C5, the immunoreactivity of the complement system in patients with AH was examined by immunohistochemistry and quantified by morphometric image analysis. The immunoreactivity intensity of C1q, C3, and C5 in patients with AH was significantly higher than that seen in normal controls. Further, the gene expression of C1q, C3, and C5 was examined using real-time PCR. There were increases in the levels of C1q and C5, but not C3 mRNA in AH. Moreover, the immunoreactivity of C5a receptor (C5aR) also increased in AH. To explore the functional implication of the activation of the complement system in AH, we examined the colocalization of C5aR in Mallory-Denk bodies (MDBs) forming balloon hepatocytes. C5aR was focally overexpressed in the MDB forming cells. Collectively, our study suggests that alcohol consumption increases the activity of the complement system in the liver cells, which contributes to the inflammation-associated pathogenesis of AH.

Andrea Trama, Information Systems and Operations Management

A Study of Attitude and Readiness for STEM Education and Careers among American and Chinese Students

Faculty Mentor: Myron Sheu, Information Systems and Operations Management

The enrollment patterns in the information systems concentration program indicate that minority students in general and female minority students in particular are more vulnerable to economic conditions in their commitment to learning information technology while increasingly more high-paying jobs demand both in-depth business and technical skills. In response, we have conducted a survey of 200 college students in the US and 200 counterparts in China about their attitude and readiness for STEM education and careers. This research project has analyzed the survey data with a focus on comparing American to Chinese students in terms of a number of factors such as preparation, interest, admiration, expectation, confidence, etc. Both statistical methods and relational queries are applied to mine the survey data. The resulting findings are quite thought-invoking and may shed light on how STEM education in the US can prepare students in unconventional approaches that can best leverage its unique strengths.
We proposed to observe the relationship between the Ataxia-Telangiectasia Mutated (ATM) protein and the Signal transducer and activator of transcription 5 (STAT5) proteins. The ATM protein, which is a PI3 kinase, is a regulator of the cell cycle checkpoints and reacts to damage in the DNA. When the cell's DNA is damaged, the protein will control whether the cell will go through apoptosis or DNA repair. The STAT5 protein has several roles in the cell, with one function to help mediate responses to cell ligands, such as cytokines and growth receptors. To activate STAT5, the protein is phosphorylated by the receptor-associated kinases and moved into the nucleus. Normal white blood cells (WBC) were grown in cell culture and treated with 10ng/mL IL-7, a cytokine that stimulates phosphorylation and activation of STAT5. Cells were treated for 60 minutes with IL-7 or not treated with IL-7. Cells were collected, washed, and cytoplasmic and nuclear lysates prepared for both samples. The proteins were electrophoresed through a polyacrylamide gel and analyzed by western blotting. Preliminary data suggest that more STAT5 was phosphorylated in both the cytoplasmic and nuclear lysates of IL-7 treated cells compared to the no-IL-7 cells. We concluded that IL-7 activated STAT5 in normal WBC after 60 minutes of cytokine treatment. We will next examine whether ATM is activated by IL-7 in the WBC, and if activated, whether ATM activation is required for STAT5 activation.
**Student Research Day 2015- Abstracts**

**Victoria vanTwist, Marina Armendariz, and Yessenia Magana, Psychology**

*Obesity-Related Eating Behaviors and Actual Health Status of Latino College Students*

Faculty Mentor: Silvia Santos, Psychology

The purpose of this study was to examine obesity-related eating habits and actual health status of Latino college students who are at a heightened risk for future diabetes onset. Participants were 156 Latino university students who were defined as being at-risk for type II diabetes by having a first or second degree relative afflicted with the disease. Body Mass Index (BMI), weight status, and Diabetes Risk Score (DRS) were used as health indicators and obesity related dietary variables included consumption of fast foods, fruits and vegetables, meats, sugar-sweetened beverages, junk food, refined grains (bread/tortillas). A socio-cultural perspective derived from the health behavior model guided inquiry of within group variations in obesity-related eating behaviors. A series of statistical analyses were conducted to identify differences in dietary behaviors and health status based on students' socio-demographic (gender, age, generational status, and income) and college profile (class standing, marital status, employment). Tests analyses revealed that women had a higher DRS. ANOVAS and t-tests analyses conducted by age, gender and marital status concluded that females, married college students and upper classmen engaged in healthier behaviors. Furthermore, younger age groups and US born generations were more likely to adopt poorer eating behaviors. Participants who frequently consumed fast foods were also more likely to drink sugar-sweetened beverages, junk foods, and fewer fresh fruits. Participants reported average 2.12 daily servings of fruits/vegetable far below that recommended dietary guidelines.

**Victoria VanTwist, Azucena Vera-Ortiz, Ozwaldo Carvajal, Psychology**

*The Benevolence of Youth: A Qualitative Study of Childhood Generosity and Gratitude*

Faculty Mentor: Giacomo Bono

This qualitative study examines multiple behaviors that young children (ages 5-10) report as sources of gratitude or examples of generosity in their daily lives. Teachers at a public elementary school in Orange County, California, were asked to instruct their classrooms to briefly describe 3 events of helpful or kind behaviors that students their age commonly do. Teachers did not specify whether students should provide examples of behaviors that are appreciated or done out of generosity, and if needed they helped younger children to write out their responses. Written descriptions of benevolent behaviors were obtained from 262 elementary students, 116 boys and 146 girls. Qualitative analysis will be conducted on these data to examine the different types of generosity and different sources of gratitude that occur in children's lives, to examine the prevalence of these themes, and to examine any patterns of differences in these themes between age groups and between genders. For the current study, the interpretation of themes and patterns will be refined through the use of inter-rater reliability analyses, and results will be interpreted in terms of theories of moral and prosocial development and emphases will be given to identifying strategies for promoting gratitude in children and to better understanding the relationship between gratitude and generosity in young children. Implications for promoting generosity and gratitude among 5-10 year old children will also be discussed.

California State University, Dominguez Hills
Test Bias and English Language Learners

Faculty Mentor: Caron Mellblom, SPE

A persistent issue with norm-referenced tests is the question of an existing bias against the students who are being administered these tests. In regards to English Language Learner (ELL) students, particularly students of Spanish speaking backgrounds, these types of tests constantly demonstrate a test profile on the areas of mental ability and academic achievement, amongst children and adults (Figueroa & Hernandez, 2000). These discriminatory results depict that there is a bias amongst these tests, and according to Figueroa and Hernandez (2000), these tests are inherently flawed because they are generally normed for monolingual English speaking populations and are being administered to the wrong population. This turns all norm-referenced tests, no matter the area of study being tested, into a series of testing for English proficiency and English literacy.

Breaking the Social Norm

Faculty Mentor: Erika Verba, History

I will be discussing, what social norm and how people tend to follow routine. To do the same thing over and over, from school, to jobs, systems but there comes a time where one must break out of the norm no longer. Examples would include individuals such as Martin Luther King who no longer felt obliged to follow the rules anymore and wanted equality for all. Technology in away has crippled society as a whole because our self-reliance on it and our dependency, from ways of communication such as cell phones and social network. No longer do we have our lives private but public to the world. In here I will discuss important historical events that have taken place which certain individuals who changed the course of history thru breaking the social norm.
Christine Walker, English

People and Places in Mary Shelley’s Frankenstein

Faculty Mentor: Debra Best, English

This paper will address the physical spaces in Mary Shelley’s Frankenstein focusing on three specific locations, the polar ice, the summit of Montanvert, and the Alsace region. Physical and political boundaries are fluid in these three settings. I propose to connect the natural influence and collective knowledge of the physical spaces to the characters that inhabit these sites. The physical presence, natural boundaries and man made turmoil of these locations reflects and affects the characters while a critical plot point occurs. The polar ice begins and ends the narration of Victor and is where Walton applies the knowledge he gains from Victor. In the mountains of Montanvert, the creature relates his life story to Victor and bargains for his future. Alsace is the very center of the novel. Each of these locations has specific boundaries that have been or are in the process of being violated. Alsace has long been politically disputed as German, French or Russian. The political turmoil of the Alsace exemplifies the nomadic existence of an exile that the De Lacey’s live and the creature yearns to join. Montanvert ties the geographical feature of an enduring mountain to a divine space where Victor and the creature forge a political agreement that Victor eventually breaks. The Russian polar ice creates a comparison to Napoleon’s ill-fated campaign of 1812 that left frozen soldiers retreating from the destination of St. Petersburg. The sublime landscape of the polar ice highlights the exposed humanity left in Victor and the choice that Walton has before him.

Michelle Weiss, English

Traditional Rhetoric Meets Alternative Discourse: Infusing Social Media in the Composition Classroom

Faculty Mentor: David Sherman, English

The use of technology and social media has significantly increased over the past ten years. Though the demographics of this escalation vary, it is evident that college students in particular are rapidly adopting a tech-based lifestyle. As a supplemental instructor for a summer composition class, I applied this data to lesson plans by implementing social media activities over the course of the semester. Through various workshop activities I adapted the instructor’s traditional assignments to include social media platforms such as Twitter and Instagram. In one activity, students live tweeted annotations as they read an article in class. With each of their tweets containing a specific hashtag, students were able to follow each other’s annotations, interact with one another, and critically respond to questions I presented in the forum. In another activity, students used Instagram to celebrate their peers’ favorable attributes. By posting strategic photos and captions of one of their classmates, students were able to practice establishing a positive ethos. David Coad of the Education department at UC Davis notes in an article, “Johndan Johnson-Eilola and Stuart A. Selber contended that electronic writing forms actually require ‘sophisticated skills of understanding concrete rhetorical situations, analyzing audiences … and constructing concise, information-laden texts, as a part of a dynamic, unfolding, social process.’” Similarly, I will argue that each of the digital activities I constructed, allowed students to understand how social media can be a collaborative and effective tool in education to compose in an academic setting, and to make larger rhetorical connections.
**Andrea Williams, Art and Design**

Borderline Walls and Nature: The Installations of Consuelo Jimenez Underwood

Faculty Mentor: Kathy Zimmerer, Art and Design

The work of Consuelo Jimenez Underwood, a contemporary artist who specializes in wall installations that feature themes in relation to migrant workers and the border between the United States and Mexico, will be explored. Her art covers everything from textiles with delicate details, to large scale installations that feature objects such as large papier mache flowers, or strands of multi-colored beads that are meant to evoke the beauty and culture of the border. Discussed will be Underwood's ideas about her works of art, such as her wall installation "Undocumented Border Flower," a work that features the border between the U.S. and Mexico. It is meant to convey a message about the destruction the border wall that has caused not only to humans but also to the plant and animal life in the area. Underwood describes this region as a wasteland or a dead zone that is symbolically separating England from Spain. The heavy toll that the wall has caused, to both human and plant life, is of the utmost importance to Underwood. She wants viewers to see that if nature is destroyed there will no longer be anything left worth preserving because only death will remain. Because she feels that the wall at the border between the U.S. and Mexico is artificial and goes against nature, her work has to be the opposite of that and must embrace the natural environment we live in.

**Melissa Williams, English**

Marie De France and Her Subversive Faerie

Faculty Mentor: Debra Best, English

Marie de France was a medieval authoress known for her lyrical romantic poems called lais. The lai “Lanval” tells the tale of a valiant knight who is taken as a lover by the faerie queen. This paper focuses on Lanval’s fairy lover and explores the extent to which Marie de France uses her to examine and criticize several aspects of Arthurian society, including marital relations, private and public identities, the role of women, and fears about homosexuality. The poem ultimately suggests that Arthurian society is so corrupt and paradoxical that it must be rejected.

The topic of medieval women, their lives, and their role in society is an area of increasing scholarship. Marie de France’s works offer the unique perspective of a female writer writing about female agency in the Middle Ages. Many critics discuss Lanval’s fairy lover’s agency in terms of her appearance or her wealth and noble status, but this argument still situates her within the constructs of Arthurian society. Those views are flawed because they assume the fairy’s power operates within the confines of the Arthuriand social order.

The right of primogeniture, or exclusive inheritance of the first-born son, in medieval society resulted in a domino effect of paradoxes, particularly for the younger sons of nobility. The success and supremacy of the right of primogeniture depended on the success of the patronage system to mitigate the disenfranchisement of younger sons. In “Lanval” the patronage system is flawed from the top down, resulting in the instability of Arthurian culture. This paper argues that the fairy and her relationship with Lanval represent a rejection of corrupt, paradoxical Arthurian society.
Jessica Wong, Health Sciences

Family influence on Adolescents Depressive Feelings

Faculty Mentor: Enrique Ortega, Health Sciences

Background: Studies suggest that depressive feelings increase during adolescence, and can become chronic for a considerable number of adolescents. The purpose of the study was to investigate the concurrent and longitudinal associations of strict family rules and parental support on adolescents' depressive feelings. We hypothesized that longitudinally less supportive relationships would lead to greater reports of depressive feelings. We expected that these correlations would be stronger in females.

Methods: The sample consisted of 169 Italian high school adolescents (52% female), ages 15-19 years (mean age = 16.9 (S.D. = 1.4)), living in the northwest of Italy. The participants were representative of the population of adolescents attending high school in these parts of Italy. The sample consisted of 328 Italian high school adolescents (56% female), ages 14-19 years (M = 16.23, SD = 1.39). Bivariate correlations were used to explore the associations of among our variable of interest. Age and gender were used as control variables in this study.

Results: among males depression at time 1 was associated with parental support at time 2 (r= -.16, p<.05). Depression at time 2 was also associated with parental support at time 2 (r= -.17, p<.05). Among females depression at time 1 was associated with parental strictness at time 1 (r= .27, p<.01) and parental support at time 1 (r= -.26, p<.01). Depression at time 2 was also associated with parental strictness at time 1 (r= .26, p<.01) and parental support at time 1 (r= -.18, p<.01); and with parental strictness at time 2 (r= .20, p<.01) and parental support at time 2 (r= -.26, p<.01).

Conclusions: Results indicated that strictness of family rules and support do effect adolescence depressive feelings. Further research is needed to clarify why we found these sex differences. Intervention implications are discussed.

Janette Wong, Health Sciences

The Association of BMI on Adolescent Mental Health Indicators

Faculty Mentor: Enrique Ortega, Health Sciences

Background: The factors that influence adolescent eating behaviors need to be better understood given increasing obesity rates among this population. This study investigated how specific mental health indicators correlated with adolescent BMI. We hypothesized that greater indications of poor mental health would correlate with higher adolescent BMI scores. Given past research in this area, we expected these correlations would be stronger among females.

Methods: The sample consisted of 452 European high school adolescents (49% female), ages 15-19 years (mean age = 17.1 (S.D. = 1.2)), living in the northwest of Italy and in the northeast of Holland. The participants were representative of the population of adolescents attending high school in these regions. Correlation analyses were used between the following variables: stress, self-esteem, depressive feelings, aggressive behaviors and BMI scores. We used an adaptation of Jessor’s Problem Behavior Theory Health questionnaire.

Results: Results among males indicated greater indications of BMI to be associated to greater indications of aggressive behaviors (r= -.14, p< .07). Among females, greater indications of BMI were associated to lower indications of self-esteem (r= -.23, p< .001).

Conclusions: Findings indicated possible sex differences on the association of selected mental health indicators and adolescent BMI scores. Further research is needed to determine the need for sex specific proper nutrition interventions.
Miyuki Woodruff, Business Administration

Do the Right Thing at PSU

Faculty Mentor: Gary Polk, Business Administration

This research is about ethical analysis of the ethical dilemmas faced at Penn State University (PSU) and the child sex scandal involving convicted pedophile and former Assistant Football Coach Jerry Sandusky happened between 1998 and 2011. First, we researched the facts about what happened at PSU from 1998 to 2011 and analyzed the case objectively. The case was viewed and discussed in depth from various critical thinking perspectives including Penn State University’s top officials themselves, university workers, University’s football team members, victims’ parents, University students, and parents in general who care about their children. The research has revealed PSU’s closed cultures, autocratic top-down organization, and each stakeholder’s self-interest before concerning the welfare of vulnerable young victims. Since 1998, more than 10 boys were victimized by Jerry Sandusky, while none of the PSU top leaders tried to face the facts happening on the PSU campus, until finally one of the victims blew the whistle in 2009. The research questioned us what would have been the right thing to do at PSU and it also made us realize what would take to do right things, not only for top leaders in large organizations, but also for every one of us who is living in everyday life.

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Filipino Elderly in Adult Day Healthcare Centers: A Narrative Analysis

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Although there is a large Filipino immigrant population in the United States, little is known about how they experience adult day healthcare centers (ADHC). In recent years, there have been discrepancies about the importance of ADHC facilities and the threats of government budget cuts indefinitely remain. Data for this study was collected from two ADHC locations, with a total of six Filipino first-generation immigrants, one male and five females, all aged 50 and older and attending the ADHC for at least 6 months. The use of semi structured interviews provided a firsthand perspective of the experiences of these ADHC participants. Through a chronological analysis based on personal, social, and environmental components, three themes emerged: social participation, health benefits, and activities-based engagement. The results of this study indicate the importance of ADHC facilities to the participants, both mentally and physically, and have implications for improving occupational therapy practice regarding client-centered care. Furthermore, ongoing research may influence future legislative decisions regarding funding for these facilities.