Fourth Annual
International Research Conference
For Graduate Students
Texas State University – San Marcos
November 7 – 8, 2012

Abstracts
# Table of Contents

Adcock, Eric ................................................................................................................. 6  
Federal Privilege in the Ombudsman's Process

Adcock, Zachary ........................................................................................................... 7  
Reproductive Biology of the Southern Dwarf Siren (Pseudobranchus axanthus) in Southern Florida

Amaya, Laura Cano and Muñiz, Osvaldo ................................................................. 8  
Geographical Model (Phase 1) for Tsunami Risk Reduction Chile, Costa Rica and Mexico

Bell, Katherine; Nice, Chris; Shapiro, Arthur M .................................................... 9  
Sympatric, Allochronic Populations of the Pine White Butterfly Neophasia menapia are Morphologically and Genetically Differentiated

Brooks, Mary E. and Khandelwal, Priyanka ......................................................... 10  
Videoconferencing vs. Traditional Communication: A Study between Adult Children and Their Parents Living Apart

Brown, Donald; Duarte, Adam; Mali, Ivana; Jones, Melissa C.; Forstner, Michael J .................................................................................................................. 11  
Impacts of a High Intensity Wildfire on Abundance, Movement, and Diversity of Herpetofauna in the Lost Pines Ecoregion of Texas

Brown, Heather .......................................................................................................... 12  
Defense by Defoliation: The Necessity for Agent Orange in Vietnam

Brown, Laura .............................................................................................................. 13  
Interdisciplinary Instructional Planning Teams: Best Practices in Small Group Communication

Bummara, Valene ......................................................................................................... 14  

Burden, Cliff .............................................................................................................. 15  
Protractive Tension as a Motivic Parallelism in Chopin’s Op. 28 No. 4

Castillo, Jessica; Chaffee, Nicole; Sampaio, Michelle; Butler, Jennifer .............. 16  
Implementation of a Demographic Study to Identify, Assess, and Serve Homeless High School Students in West Texas

Chen, Haoran; Martin, Jarett C.; Oliphant, Adam J.; Doerr, Paige A.; DeBorn, Katelyn M.; Xu, Jeffery F.; Sun, Luyi; Wang, Hong; Wang, Weixing .................................................. 17  
Extraction of Lignocellulose and Synthesis of Porous Silica Nanoparticles from Rice Husks A Comprehensive Utilization of Rice Husk Biomass

Coats, Cala ............................................................................................................... 18  
Searching for Nomads: An Autoethnographic Inquiry as Tourist in My Community

Craig, Clay; Campbell; Brittany; Baker, Danette ....................................................... 19  
Digital House Calls: Are Health Care Professionals Becoming More Social
Craig, Clay ............................................................................................................................... 20
Influencing Prosocial Behaviors: A Consumer Socialization Perspective

Dascher, Erin and Hustvedt, Gwendolyn ............................................................................. 21
Wasting Away: Consumer Ecological Knowledge and Drought Response

Dede-Bamfo, Nathaniel ........................................................................................................ 22
Assessing land cover change in San Marcos, TX – 1985 to 2010

DeHart, Kendra Kay ............................................................................................................ 23
“Help Them Help Themselves”: Home Demonstration Work in Early-Twentieth-Century Texas

Duarte, Adam; Weckerly, Floyd W.; Hatfield, Jeff S.; Hines, James E.; Nichols, James D .......................................................................................................................... 24
Adult and Juvenile Survival of Male Golden-Cheeked Warblers on the Fort Hood Military Reservation

El-Khoury, Jessica R .............................................................................................................. 25

Ferrer, Iliana and Sinta, Vinicio ............................................................................................ 26
Perceptions of Television News Sensationalism by Spanish Audiences

Garza, Jose ............................................................................................................................... 27
Rhythmic and Metric Analysis of Metal Music: A Bibliographic Essay

Gong, Zijian ............................................................................................................................ 28
Quality Versus Quantity: The Impact of Online Product Reviews on Customers’ Purchase Intention

Gong, Zijian and VanDyke, Matthew .................................................................................. 29
The Impact of Presentation Format of Repetitive Mass Media Commercial Messages on Customers Perception and Memory

Green, Jennifer ....................................................................................................................... 30
Can Television Commercials Prime Self-aspects?

Guzman, Stephanie; Kenney, Kristina; Vasquez, Ashley ...................................................... 31
Perceptions of Pregnant Latinas in Hollywood Film

Haislett, Robin L ....................................................................................................................... 32
The Playform of Communication: A Thematic Exploration of Video Game Culture and Those Who Game

Hatch, Amy .............................................................................................................................. 33
Transforming Stravinsky’s Double Canon

Hirak, Charles Brent .............................................................................................................. 34
A Soup Kitchen’s Stories: Exploring Identity and Context through Narrative Inquiry

Ho, Sze Wing ........................................................................................................................... 35
Comprehensibility in Schoenberg’s Piano Suite Op. 25 No. 5

Kelly, Janiece; Guirguis, Mina; Richter, Seth ..................................................................... 36
Stealthy Attacks on Pheromone Swarming
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khandelwal, Priyanka and Brooks, Mary E.</td>
<td>A Comparative Analysis of the Impact of Word-of-Mouth Marketing Communication Versus Media-based Marketing Communication in Banking Decisions among Young Working Professionals</td>
<td>37</td>
</tr>
<tr>
<td>Kiambi, Dane</td>
<td>The Role of Public Relations in Image Cultivation of Kenya in the United States</td>
<td>38</td>
</tr>
<tr>
<td>Korn, Matthew</td>
<td>Queer Theory and Same-Sex Marriage: A Path to Liberation?</td>
<td>39</td>
</tr>
<tr>
<td>Kleitches, Larry</td>
<td>Learning Geography from Crosby, Stills, and Nash: The Coconut Milk Run</td>
<td>40</td>
</tr>
<tr>
<td>Kleitches, Larry</td>
<td>Pennies for Your Thought: Advantages and Disadvantages in the Use of Vintage Picture Postcards as Photographic Sources for Exploring and Transmitting Geographic Changes</td>
<td>41</td>
</tr>
<tr>
<td>Lee, Sejin; Noh, Seungwha; Bang, Hyejin</td>
<td>Effective Advertising Message Strategies for eWOM in SNS: Regarding the Tie Strength, Message Characteristics and Product Involvement</td>
<td>42</td>
</tr>
<tr>
<td>Loff, Keli</td>
<td>Being Bilingual on the Border: Brownsville, Texas</td>
<td>43</td>
</tr>
<tr>
<td>Lozano, Tatiann; Martinez, Linda M.; Soliz, Erika; Peralez, Loni</td>
<td>MISTIC Successful Collaboration for International Speech-Language Pathology Service Delivery Model</td>
<td>44</td>
</tr>
<tr>
<td>Luna, Ryan; Duarte, Adam; Weckerly, Floyd W.</td>
<td>Rumen-Reticulum Characteristics, Scaling Relationships and Ontogeny in White-Tailed Deer (Odocoileus Virginianus)</td>
<td>45</td>
</tr>
<tr>
<td>Lyons, Emily S.; Willfarth, Cordula; Hurst, Kimberly</td>
<td>How Religious Content in Political Campaign Advertising Affects Intention to Vote</td>
<td>46</td>
</tr>
<tr>
<td>Mali, Ivana; Forstner, Michael R.J.; Wang, Hsiao-Hsuan Rose</td>
<td>Use of Demographic Sensitivity Analysis in Management of Freshwater Turtle Harvest</td>
<td>47</td>
</tr>
<tr>
<td>Markham, Desirée</td>
<td>Overfed and Undernourished: America’s Health Care Crisis</td>
<td>48</td>
</tr>
<tr>
<td>Maeda, Carla Maria and Estrada, Karina Franco</td>
<td>Beyond “Happily Ever After” Analysis of the Representation of Princesses in Walt Disney Movies and Their Sequels</td>
<td>49</td>
</tr>
<tr>
<td>Mattison, Jamie</td>
<td>International Teachers in Texas Public Schools: English Language Preparation for Success of Teachers from Spanish Speaking Countries.</td>
<td>50</td>
</tr>
<tr>
<td>McClarnney, Kevin B.</td>
<td>A Cambridge Mass by Ralph Vaughan Williams: The Doctoral Music Examination composition that was forgotten.</td>
<td>51</td>
</tr>
</tbody>
</table>
Sansom, Lindsay........................................................................................................ 67
Climate Change Adaptation and Water Resources Management in Mexico

Sharma, Shobhit and Ceballos, Natalie........................................................................ 68
Effect of Exercise/Physical Activity on Perceived Stress and Salivary Cortisol Levels in Adolescents

Truong, Tri.................................................................................................................. 69
State Applications Act does not satisfy statutory requisite of clear and unambiguous waiver of sovereign immunity for anti-retaliation claims

VanDyke, Matthew and Gong, Zijian.......................................................................... 70
Exploring the Relationship Between Crisis History, Personal Involvement and Energy Company Credibility

Vázquez, Amparo....................................................................................................... 71
The Gnome in “Le Fabuleux Destin d’Amélie Poulain”: Incommunication and Games of Freedom

Villamizar, Andrea..................................................................................................... 72
Chytridiomycosis: A Disease Affecting Amphibian Population in Central Texas

Wallace, Derek M.; Farallo, Vincent; Buzo, Daniela; Forstner, Michael R.J.................. 73
A Proposal for Estimating B. Houstonensis Habitat: Is There a Link Between Fragment Metrics and Local Extirpation?

Weyland, Desirae M.; Nice, Chris............................................................................... 74
Mechanisms of Alternative Invertebrate Reproductive Strategies: Investigations of Sympatric Species in the Genus Asterocampa (Nymphalidae)

White, Shawna.......................................................................................................... 75
The Effect of the Fear Appeal in Advertising on the Link between Motherhood and Environmental Concern

Williams, Leilani, Zhang, Yixin; Williamson, Paula...................................................... 76
Evaluation of Ecosystem Function of Urban Streams and Riparian Systems in Austin, Texas, USA

Wolcott, Daniel M.; & Weckerly, Floyd W.; Asmus, Jim............................................ 77
Compensatory Growth in Southern Mule Deer
Federal Privilege in the Ombudsman’s Process

The purpose of this study is to examine the concept of federal privilege relative to the ombudsman’s role as a dispute resolution professional. Privilege, a special legal exemption or immunity, protects the holder of the privilege from disclosure of confidential communications. This paper considers whether ombudsmen, as holders of privilege, can raise such a defense to prevent information about their communications or activities from being used as evidence in legal proceedings. Ombudsmen, acting as representatives of both public and private institutions, have been afforded recognition in federal and state jurisdictions regarding the privileged nature of their communications with visitors. While this study analyzes only federal interpretations of ombudsman privilege, controversy exists because such rulings have not been uniform throughout federal courts.

Approach

This study begins by tracing the modern history of the ombudsman role. It then defines the diverse types of ombudsmen who operate in federal, state, corporate, and social realms. Next, this study scrutinizes the nature of privilege that an ombudsman has been granted in his/her communications with visitors by the federal courts through the Federal Rules of Evidence and the common law. This study concludes by evaluating the instances where federal courts have neglected to address arguments in favor of ombudsman privilege or have overruled identical arguments through the judicial principles of preemption and waiver.

Results

Absent any federal statute that explicitly protects most communications between an ombudsman and a visitor, federal courts will continue to interpret ombudsman privilege on a case-by-case basis with inconsistent results throughout the country.
Adcock, Zachary C.

Biology, Texas State University – San Marcos, TX

Reproductive Biology of the South Dwarf Siren (*PSEUDOBRANCHUS AXANTHUS*) in Southern Florida

Research Question

The salamander family Sirenidae is composed of two extant genera, *Siren* and *Pseudobranchus*, each with two known species. Several questions regarding Sirenidae life history persist, and much of the available life history data for *Pseudobranchus* are attributed to studies of *P. axanthus* in northern Florida. Information on the reproductive biology of *P. axanthus* is limited, and historical references often suggest contradictory results. This study was undertaken to clarify information and expand on the limited data regarding *P. axanthus* reproductive biology, specifically for southern Florida populations.

Results

The study population was most likely the *P. a. bellii* subspecies. *P. axanthus* in southern Florida exhibited year round, continuous reproduction with oviposition documented in nine months. Potential clutch size was positively correlated to female size. The largest observed potential clutch was a female with 58 pre-ovulatory oocytes. The largest observed bout was a female with 15 oviductal eggs. Female *P. axanthus* in southern Florida oviposited eggs singly and at total densities of 3-4 eggs/m². Developmental time to egg hatching lasted about 30 days, larvae hatched at 16mm TL, and minimum size at female sexual maturity was 115mm TL and 72mm SVL. The reproductive biology of *P. axanthus* was distinctly contrasting to other members of the family Sirenidae, *S. intermedia* and *S. lacertina*, that occupy the same habitat at the same study location.
Amaya, Laura Cano and Muñiz, Osvaldo

Geography, Texas State University – San Marcos

Geographical Model (Phase 1) for Tsunami Risk Reduction Chile, Costa Rica and Mexico
Lovell Center for Environmental Geography and Hazards Research- Department of Geography

Problem
Local and regional tsunami events cause considerable property damage and high casualties when preventive measures to reduce risks are scarce or they have not been designed at all. Hazard mitigation and preventive measures are focused on the creation of physical structures to reduce the effect of high waves (Koutitas and Karambas, 2005), geospatial information to model wave trains on coastal areas and emergency relief (ESRI, 2006), warning system procedures for effective and efficient evacuation (Bernard, 2005), and educational programs for public awareness (Samant, Tobin, and Tucker, 2007; Damiano and Pacheco, 2011).

Approach
The first phase of this study develops a geographical model for population evacuation based on geospatial analysis. The second phase is devoted to design evacuation strategy procedures based on specific geographical education objectives. During the first phase the researchers work with three specific locations in Chile, Costa Rica, and Mexico in order to obtain a geographical model.

Results
This is the preliminary work of Phase I of the study which focuses on geomorphology/geology and bathymetry, population maps, and initial preliminary evacuation route maps. The sites presented for the preliminary geographical evacuation models are from Chile, Costa Rica, and Mexico. The study of specific locations allows a comparison of coastal characteristics and geomorphology of local and contiguous region, population distribution, and population density.
Allochronic isolation remains an understudied, and potentially under-appreciated, mechanism of reproductive isolation. Allochrony has been detected in two sympatric populations of the pine white butterfly (*Neophasia menapia*); a typically univoltine species found throughout Western North America. At two sympatric sites in California there are early and late flights. Differences in flight time are accompanied by differences in wing shape and pigmentation. A combination of morphological analysis and population genomics was used to assess population differentiation at both sympatric sites.

Differences in wing shape and pigmentation between early and late flights were quantified. Pigmentation was significantly different at both sympatric sites, while shape was significantly different at just one of the sites. 20,737 SNP’s, obtained using next generation sequencing, were used to calculate pairwise FST’s. FST between early and late flights was significantly different from zero at both sympatric sites. The hypothesis of a double invasion from Sierra Nevada sites to Coastal Range sites, leading to the two flights at sympatric sites, was rejected. Allochrony is likely to have arisen in sympathy, from within the Coastal Range.
Brooks, Mary E. and Khandelwal, Priyanka

Media and Communication, Texas Tech University

Videoconferencing vs. Traditional Communication: A Study between Adult

This study would examine how adult children of parents that live in a retirement community communicate with their parents via videoconferencing (e.g., Skype, Face Time) compared to telephone (e.g., cell phone, landline). Feelings of guilt, connectedness, and frequency of face-to-face visits with parents will be assessed. As the elderly population continues to increase, older parents are living in some type of a retirement community, including independent living, assisted living, or a long-term care setting.

The population of interest for this study is adult children who have parents living in some form of a retirement community in a geographically distant location. Adult children, specifically those that are distanced from their parents, are likely to feel a sense of guilt for placing their parents in that type of setting. This study will assess the feelings of guilt that adult children experience when their parents are living in a retirement community in order to compare adult children who use videoconferencing and those who do not. There is also reason to believe that communicating with someone via videoconferencing can enhance a sense of connection. This report would measure the sense of connection adult children have with parents living in a retirement community in order to compare adult children who use videoconferencing and those who do not. Lastly, there is reason to speculate that some people may use videoconferencing as a replacement for a face-to-face visit. As such, this study would measure the frequency of face-to-face visits in order to compare adult children who use videoconferencing and those who do not.

This research project would delve into various aspects of long distance relationships and how those relationships have fared using videoconferencing. Practical implications of this research could involve retirement communities’ increase in training more residents on how to use videoconferencing technologies. Research questions to be answered by way of an online survey aimed at adult children would be:

RQ1: Do adult children who use videoconferencing to communicate with their parents have reduced feelings of guilt and an increase sense of connectedness compared to adult children who rely on telephones only?

RQ2: What is the frequency of actual face-to-face visits based on using videoconferencing technology compared to telephones?

Based on Uses and Gratifications Theory adult children and older parents are using videoconferencing technology in order to fulfill the need of social interaction. Another motive for using videoconferencing includes surveillance. Adult children who are able to see their parents by way of videoconferencing versus only speaking to them by way of telephone will help them feel connected. Thus, the purpose of this study is to prove that videoconferencing is used as a medium between adult children and their older parents to communicate, as well as, be together as a family although not physically, as well as, hopefully prove that guilt is reduced in adult children when videoconferencing is used a substantial amount of time.
In September 2011 a wildfire burned 39% of the Lost Pines ecoregion in Bastrop County, Texas. We assessed short-term impacts of the fire on abundance, movement, and diversity of herpetofauna to provide information for fire recovery and habitat restoration initiatives.

Methodology and Results

To assess fire-induced mortality, we sampled herpetofauna 6 weeks prior to, and 3 weeks after, the wildfire on the 1,948 ha Griffith League Ranch using 24 drift fence arrays. From N-mixture model analyses, abundance of anurans, southern prairie lizards (*Sceloporus consobrinus*), and six-lined race runners (*Cnemidophorus [Aspidoscelis] sexlineatus*) was not significantly impacted by the wildfire. We also assessed movement rates by determining if detection probability differed by treatment in the N-mixture model analyses. Then, we sampled herpetofauna for 72 consecutive days in spring 2012, and obtained sufficient Hurter’s Spadefoot Toad (*Scaphiopus hurterii*) recaptures to test for treatment differences in detection probability using a mark-recapture model. Our analyses indicated that detection probabilities, and thus movement rates, were greater in the wildfire treatment. Finally, we tested for differences in herpetofaunal species composition using Analysis of Similarity tests. We found that species composition did not differ between the control and wildfire treatments prior to the fire, immediately after the fire, or the following spring.

Implications

Collectively, our data indicate the wildfire had minimal short-term impacts on abundance and diversity of herpetofauna, a positive result for conservation in this ecoregion. We consider this to be evidence useful to the recovery efforts for the endangered Houston toad (*Bufo houstonensis*). Further, our study indicated that investigations focused on fire impacts to ground-dwelling wildlife should consider detection probability when drawing inferences concerning abundances, particularly when differences in ground structure are apparent.
Brown, Heather

History, Texas State University – San Marcos

Defense by Defoliation: The Necessity for Agent Orange in Vietnam

In Hollywood films like *We Were Soldiers*, *Platoon* and *Full Metal Jacket*, little attention is given to the tactical use of herbicides, specifically that of Agent Orange, during the Vietnam War. The overwhelming, and widely-held opinion, from American Vietnam War veterans and their families regarding Agent Orange is negative – due to numerous claims of slow-growing, long-term health defects from exposure to the herbicide. This study explores the U.S.’s commercial development and aggressive use of Agent Orange, examining its negative ecological impact as relates to foliage regrowth in southern Vietnam. Additionally, this study will refute the assumption that the successful testing of Agent Orange preceding the Vietnam conflict deterred the U.S. military from utilizing other defoliation options. This research draws upon primary sources including studies conducted by The National Academy of Sciences, specifically the Committee on the Effects of Herbicides in Vietnam.

Small group communication occurs in many contexts within the field of education, but none are as fundamental to the education of the whole student as interdisciplinary instructional planning teams (IIPTs). IIPTs are an increasingly popular pedagogical approach, because these planning teams are able to share information about students and their families, work on collaborative assignments across disciplines, and structure their classes so that the students receive the best possible educational experience (Havnes, 2009; Centerii, 2011). Originally these teams were used within departments, subject areas, or grade levels, but research points to greater gains in learning when interdisciplinary planning teams are utilized (Havnes, 2009; Maclver & Epstein, 1991). Unfortunately, interdisciplinary groups face more conflict and require more advanced small group communication skills, because each teacher views the world through a different rhetorical framework or terministic screen (Burke, 1966). In order to be more effective and efficient at reaching consensus, IIPTs should receive training in small group communication. This review of the literature answers the following two research questions:

**RQ1:** What small group communication behaviors lead to consensus in interdisciplinary educational planning teams?

**RQ2:** Are these small group communication behaviors specific to teachers or are these skills standard across all small groups?

The following small group behaviors lead to consensus: using a problem solving model, finding a balance between structure and interaction, using meta-discussion, avoiding groupthink, using critical evaluation of ideas, and striving for unanimous agreement. These behaviors are common across all groups, but have unique applications for IIPTs because of the nature of long and short term group membership defined by semesters or school years.
Bummara, Valene

Journalism and Mass Communication, Texas State University – San Marcos


A hotly debated topic in American society in 2012 has been the alleged “war on women.” So far this year, two events in this war have received a great deal of attention. First, the Obama administration announced a mandate that would require virtually all employers to provide contraceptives under their employee insurance plans. Shortly afterwards, ultra-conservative radio host Rush Limbaugh caused a media firestorm by calling Georgetown Law student Sandra Fluke a “Slut” and a “prostitute” for asking the government to pay for her birth control.

(A) The research question in this paper seeks to find out how selected U.S. news magazines each covered the access to birth control debate during January to April 2012.

(B) The present study employs a content analysis of six U.S. news magazines from across the political spectrum, including *Time, Newsweek, The Nation, In These Times, The Weekly Standard* and *National Review*. Coverage was analyzed through framing theory.

(C) Findings revealed that liberal coverage framed the issue of access to contraception and the HHS mandate more favorably while conservative magazine framings were unsupportive. Arguments expressing support for the mandate tended to emphasize the benefits of contraception to society and its popularity and widespread use by women. Arguments opposing the mandate stressed its disregard for conscience rights of religious institutions and cited the widespread availability of contraception to women, thus rendering the policy as an unnecessary government expense.
Perceptual and analytical complications arise when examining tonal ambiguity in 19th-century music. Addressing these complications, this study reveals and interprets the musical components that induce tonal ambiguity in Chopin’s famous E-minor prelude, op. 28 no. 4. In his study of this piece, Carl Schachter finds a chromatically embellished contrapuntal progression. Studies of Chopin’s ambiguity, like Schachter’s, often employ a linear examination of chromaticism, as opposed to a vertical examination of harmonic function.

While my analysis of op. 28 no. 4 is both linear and vertical, I primarily employ the latter by exploring protractive tension as a source of tonal ambiguity. Established on multiple levels by the constant denial of harmonic resolutions, protractive tension creates a motivic parallelism. I classify these levels as cognitive aspects of melodic expectation, providing three ways in which tension is perceived. The first level is the tension sensed when hearing the prelude; I refer to this as “sensible” tension. The second level is the tension that is consciously perceived via visual and aural illustrations; I refer to this as “unveiled” tension. Finally, I refer to the tension that permeates the prelude on a larger scale, revealed by Schenkerian reductions, as “structural” tension.

By exposing the multiple layers of tension in Chopin’s op. 28 no. 4, I will not only provide a new aural perception of the work, but I will also explore ways to interpret tonal ambiguity in 19th-century music.
Social Work, Abilene Christian University

Implementation of a Demographic Study to Identify, Assess, and Serve Homeless High School Students in West Texas

Introduction and Statement of Purpose

Homeless students typically are less successful academically and have lower attendance rates than their peers (Bowman, Dukes & Moore, 2012). Given the significant economic problems of recent years the homeless student population in one year (i.e., 2008) saw a 16% increase in their numbers (Kingsbury & Howarth, 2009). The literature indicates that effective interventions that will help to enable homeless students enhance their academic success are multi-faceted and significant in their scope (Grothaus, 2011). Regrettably, virtually all the published research has been done in urban settings, and have limited applicability to the Hispanic community that may reside in mid-sized, small, or rural settings. In order to determine what interventions are needed to improve Hispanic student academic outcomes and graduation rates, information is needed regarding the homeless population of the specific school district(s), so that adaptations of interventions reported in the literature can be made based on local needs and better use of limited community resources.

Rationale and Approach

A large school district in West Central Texas was selected due to district administrators’ interest in improving graduation rates among Hispanic students. The district has a large identified homeless student population with approximately 900 identified homeless students out of a student population of 16,000+ (approximately 5%). The district’s Hispanic made up the largest ethnic group of non-Caucasian students in the 2010-2011 school year (39%), and one-third of those classified as homeless (34%).

This study was a stratified random sample of homeless students at the two local high schools (n=93). Results found that there were no significant differences between the homeless students and their peers. Although there was no significant differences with regards to the ‘type’ of transportation used, Hispanic students were significantly (p<0.01) more likely to be absent. There were no significant differences with regards to employment rates, hours worked, or perceived effect of employment on school attendance or performance. However, when broken down by ‘accompanied’ versus ‘unaccompanied’ status, employment, living arrangements, times moved, length of homeless status, type of transportation, transportation time, and number of absences did have a significant perceived negative effect (p values ranged from p<0.03 to p<0.00) on school work for the unaccompanied group. Unaccompanied youth were also significantly more likely to be medically disabled (p<0.00).

The results of this study are currently being used by the local school administration to implement future policy changes and other interventions formulated to improve the success of all homeless students, including the large number of Hispanic students within that population. The information obtained from this research has been utilized in the preparation of a grant that targets academic improvement among Hispanics and other at-risk students. Additionally, the information is being used to collaborate with community agencies that have both the resources and interest in providing services to homeless children and youth and can assist them with meeting academic goals.
Chen, Haoran; Martin, Jarett C.; Oliphant, Adam J.; Doerr, Paige A.; DeBorn, Katelyn M.; Xu, Jeffery F.; Sun, Luyi; Wang, Hong; Wang, Weixing

Chemistry and Biochemistry, Texas State University – San Marcos
Chemistry and Chemical Engineering, South China University of Technology-Guangzhou, China

Extraction of Lignocellulose and Synthesis of Porous Silica Nanoparticles from Rice Husks – A Comprehensive Utilization of Rice Husk Biomass

Rice husk (RH) biomass is a massive byproduct from rice milling. Applications of RHs have been very limited. Therefore, RHs are often considered as a biowaste. RHs are mainly composed of lignocellulose (ca. 72-85 wt%) and silica (ca. 15-28 wt%). Majority of previous explorations focused on the preparation of silica or other silicon based materials from RHs, while the lignocellulose in RHs was usually burnt and thus wasted. Herein, an approach for comprehensive utilization of RHs has been developed to obtain both lignocellulose and high quality porous silica nanoparticles from RHs. Most of the lignocellulose in RHs was firstly extracted by dissolving in ionic liquids. The dissolved lignocellulose was subsequently separated and collected. The remaining RH residue after extraction that contains a high concentration of silica was thermally treated to synthesize amorphous porous silica nanoparticles with a high purity and surface area. It was also found that during the extraction of lignocellulose using ionic liquids, some metal cations (e.g. K+) that generate negative effect for the synthesis of silica can be removed simultaneously, which generates a synergy for this comprehensive approach to make full use of RH biomass. The implication of the present findings is discussed.

Keywords: Comprehensive utilization, rice husks, lignocellulose, silica
Coats, Cala

Art Education/Art History, University of North Texas

Searching for Nomads: An Autoethnographic Inquiry as Tourist in My Community

As I drove around Denton, Texas looking for improvised uses of space for a photography course, I wondered how that type of site could have meaning in a suburban context. Would I even recognize it? But as I looked more closely, those spaces which were often unregulated, suspicious, or temporary generated ideas for the potential of community-driven, grassroots change. By examining improvised spaces as material sites of creative potential, I considered how agency and resistance are embedded in the everyday.

This place-based inquiry examines the rhizomatic development of an autoethnographic inquiry into improvised uses of space in Denton, Texas using the camera as a reflexive tool. Over time, my visual focus shifted to local retail sites, while the pedagogical subject of the study became a reflexive understanding of the ways that representation, assumption, privilege, and knowledge were circumscribed by power relations as they unfold through the inquiry process. The project also revealed how the use of photography triggered reflexivity and an awareness of the invisibility of populations in my community.

It asks how I might learn from defamiliarizing my local community, how encounters with difference might reveal my fluid cultural positionality, and how legitimacy becomes relational and context-dependent. As I set out to photograph unfamiliar and innovative local sites, I realized the project taught me more about my assumptions and biases than the physical sites or those who occupied them.
The health care profession is not immune to the increase in popularity of social media websites. As 80% of Americans with Internet access search for health information, it is important for health care professionals to adapt to the needs of their clients. Applying uses and gratifications as a theoretical framework, the current study seeks to determine the motivations behind and hindrances of health care professionals using social media in both their professional and personal lives. Through the use of an online survey of health care professionals, this study offers insight into the differences among health care professionals use of social media and reveals three dominant motivations for using social media: professional self-expression, social entertainment, and convenience.

*Keywords:* health care, uses and gratifications, social media, health care professionals
Craig, Clay

Media and Communication, Texas Tech University

Influencing Prosocial Behaviors: A Consumer Socialization Perspective

Individuals donating to and volunteering with charitable organizations is an important and growing aspect of society, accounting for $111.77 billion in donations and 8.1 billion volunteer hours in 2010 (Giving USA, 2011; Corporation for National and Community Service, 2011). Nendapudi, Singh, and Bendapudi (1996) suggest marketers should play an important role in positively influencing helping behavior by developing understandings of the motives that influence each behavior. Previous research has addressed various factors influencing these prosocial behaviors, but there is a dearth of research using the consumer socialization perspective. Consumer socialization is defined as the “processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace” (Ward, 1974, p.2). The current body of research utilizes consumer socialization theory to examine the influence of three socialization agents (parents, peers, and media) have on individuals’ behavioral intentions to volunteer and donate.

The purpose of this study is twofold, to expand the application of consumer socialization to include prosocial behavior and to determine the factors (individual differences, parents, peers, and media) that have the most influence in various types of prosocial behavior (both monetary donations and volunteering).

Through the use of an online survey of college students, the expected results will reveal peers are the most influential socialization agent followed by parents and media. Additionally, practical implications for marketers to increase prosocial behavior will be discussed.

Keywords: prosocial behavior, volunteerism, consumer socialization, charitable donations
A survey of 273 Texas consumers included questions addressing perceived concerns about water resources as well as consumers’ knowledge of the on-going drought throughout the state. One goal of this survey was to examine the level of ecological knowledge and ecological concern produced by a major drought event. The majority of participants stated that the current drought was worse compared to previous droughts, and that they were concerned about their local water resources being able to continue to provide water. However, 61% of the participants reported that there are not currently any drought restrictions in their area and only five participants knew what system is used to denote drought intensity in the United States. The leading concern expressed about the current drought was the continued availability of water; however the second leading response was one of no concern.

Only eleven consumers were concerned about permanent impacts or the possibility of the current drought becoming a long-term event. 41% of the participants said they were unsure when the current drought would end, but 25% of the participants said they thought the drought would end this year. Seasonal warm weather and weather patterns were the two most popular reasons respondents chose as causing the current drought in Texas, while only 6% of consumers felt that water policies/litigation and farming practices contributed to the drought conditions. Global climate change and human behavior were both commonly selected by consumers as reasons contributing to the current drought in Texas, but the history of seasonal droughts tempers responses to severe drought conditions. The results suggest that while the severity of the current drought has Texas consumers concerned about the continued availability of water in the region, it has not lead to an apparent demand for a change in water policy or resource management.
Dede-Bamfo, Nathaniel

Geography, Texas State University – San Marcos

Assessing land cover change in San Marcos, TX – 1985 to 2010

Problem and Approach

The advent of satellites made possible for easy tracking of changes on earth. Images obtained from satellites are commonly used for mapping land cover and land cover changes. Knowing and accurately recording changes in our environment is helpful for both government and researchers to plan strategically and efficiently towards the future and understand the dynamic nature of our planet. Such issues can be handled effectively through remote sensing applications, specifically applying change detection techniques. Change detection is simply comparing two or more geographically identical, but temporally separate images to identify variation in land surface cover features (Wang and Xu, 2010). The approaches for change detection are varied. Nevertheless, most analysts prefer to conduct it after a pre-classification of the images into land cover types. In such instance, the credibility of the results depends on the outcome of the pre-classification. Another common practice in change detection is using images from a single season for image classification. However, this tends to pose some challenges when determining the right classes for the land cover type. To reduce such problems, some scholars have proposed the use of multi season data in an approach called Matrix Analysis (Petrov and Sugumaran, 2005). By applying this method, this study determined land cover changes in the San Marcos, Texas area between 1985 and 2010 and also estimated how the approach improved upon a regular change detection process.

Results

The results from the matrix analysis proved efficient in both the land cover mapping and change detection analysis. Taking advantage of seasonal variations by using images from two different seasons in the same year, the matrix analysis was able to reduce misclassification errors and thus, able to produce a comparatively more accurate land cover map (average overall accuracy = 76%). This in turn influenced the outcome of the change detection (overall accuracy = 61%) since the level of accuracy of the change detection essentially was dependent on the accuracy of the input land cover data. Furthermore, the matrix function proved very efficient in revealing specific within-land cover class changes that occurred over the 25 year period.
DeHart, Kendra Kay

History, Texas State University – San Marcos

“Help Them Help Themselves”: Home Demonstration Work in Early-Twentieth-Century Texas

Problem or Research Question

In the early decades of the twentieth century, declining crop prices and increasing rural-to-urban migration stressed the economic and cultural stability of the American farm. Noting the increasingly harsh conditions that befall many rural families, advocates from urban middle-class backgrounds sought reform efforts to improve rural conditions before the nation’s tradition of the hardworking, independent farmer disappeared. The solution to America’s agrarian crisis resulted in a national campaign to rescue the family farm and the wholesome, American values that it represented. The Smith-Lever Act of 1914, which provided federal funds to state land grant colleges, afforded the means to extend education to America’s rural population through the teaching of practical and innovative agricultural and homemaking techniques to farmers and their wives. Thus, the Extension Service was established at Texas A&M University, and its trained male county agricultural agents and female home demonstration agents dispersed into rural communities. According to an article by the Honorable A.F. Lever, the Extension Service was “the most universal university” designed to provide rural people with the means to “help them help themselves.”

The purpose of this project is to explore the origination of home demonstration work in Texas and the affects the programs had on its rural population with particular emphasis on rural women. Themes, such as the patriarchal division of labor on the family farm, the origination and politics of the Extension Service, and the tensions between local and federal allocations of funds, are explored.

Methodology

The research for this project largely draws on the Texas Extension Service Historical Collection at Cushing Memorial Library & Archives at Texas A&M. This collection contains information about the origination of Extension Service programs throughout the state. Other collections explored include the Southwest Collection at Texas Tech University and the West Texas Collection at San Angelo State University. In these collections are oral histories, many from home demonstration club members themselves. Finally, though the numbers of living home demonstration club members are dwindling today, the author plans to conduct her own oral histories, one of which has already been collected.

Results

The author expects to find how rural women throughout the state (as well as home economists and home demonstration agents themselves) benefited significantly from the lessons learned through home demonstration work. By offering educational demonstrations on a wide variety of subjects in the domestic sciences, the Extension Service taught rural women ills that would not only improve the standard of living on their farms and in their homes, but would also encourage larger community improvement campaigns in rural counties that ranged from public health to rural electrification. Additionally, the pairing of Extension Service personnel and college home economists increased women’s professionalism in the early twentieth century as well.
Problem or research question

The golden-cheeked warbler (*Setophaga chrysoparia*) is a federally endangered passerine that breeds exclusively in the juniper-oak woodlands of central Texas. Previous warbler population models are currently assisting the USFWS Golden-Cheeked Recovery Team in deciding the amount of protected breeding habitat necessary to sustain viable warbler populations. However, previous warbler population models only dealt with the breeding habitat between the Fort Hood Military Reservation and San Antonio, Texas. No range-wide warbler population model has been constructed to date. Moreover, demographic estimates used in previous warbler population models were calculated using relatively small data sets with data from 2001 being the most recent field season analyzed. Therefore, our objective was to estimate updated, more precise estimates of juvenile and adult survival rates for male warblers in order to use these estimates to develop a range-wide population model for the species.

Methodology or approach

We used warbler capture-recapture data collected by two research programs on the Fort Hood Military Reservation from 1992 to 2011. Because of sampling protocols, we estimated juvenile and adult survival rates in separate analyses. For both analyses we used the Cormack-Jolly-Seber model structure within program MARK. Estimates of temporal variability in survival rate estimates are positively biased when not accounting for sampling variability, which will artificially increase the risk of extinction for a species in population models. Therefore, we also distinguished sampling variance from process variance for our warbler survival rate estimates.

Results or expected results

Average annual survival rate estimates for adult and juvenile male warblers were 0.48 (Temporal Variance = 0.0096) and 0.30 (0.0077), respectively. We will combine these estimates with newly published information concerning range-wide warbler abundance, productivity, and distribution to create a range-wide population model for the warbler, which will assist with current and future recovery efforts. However, we stress that there is an inherent limitation to applying these survival estimates to population models at a range-wide scale because all warbler survival rate estimates thus far have been calculated from data collected on the Fort Hood Military Reservation. It is essential we understand how population demographics vary regionally in order to model and manage range-wide populations more effectively.
El-Khoury, Jessica R

Media and Communication, Texas Tech University


Problem and Research Questions

With the growth of global communication systems, advanced by mass production of informative material and mass media, especially now the significance of the Internet, communication technology has transferred and is spreading not only from one room to another, however from medium to medium, such as the case with television and the Internet. Before, programs, commercials and news reports where broadcast through television. Nowadays the same programs can be streamed on the web, plus at an individual’s time and leisure. These means of communication are used to spread messages. The purpose of a communication message is to produce some kind of change in people socially and knowledgably. In a world revolving around new technology, communication reaches the masses at a faster pace than years past, especially through the Internet. This paper will discuss the concept that with the Internet and social network sites, marketers, branding agencies/companies have many opportunities to reach new markets by incorporating the new trends and using the new tools and models in their marketing strategies. Therefore, allowing them to save their stations money, yet still reach a wider audience. Selective exposure theory posits people are more likely to choose content that is consistent with their views and beliefs (Zillamnn & Bryant, 1985). In the same manner, communication professionals should be aware of these types of selections in order to progress.

\textit{RQ1}: Could the interactivity of the Internet, multitude of information access portals, and preferred means of communication, act as moderators to the selective exposure theory?
\textit{RQ2}: Does the selective preferences of individuals transfer from one platform to another platform?
\textit{RQ3}: What factors make the selected platform more attractive than the others?
\textit{RQ4}: Which medium would they select to see advertisements more readily?

Methodology

In order, to answer the research questions posed, the researcher will first conduct an Internet based survey to West Texas participants. Following, and according to the results, the researcher will gather approximately 60 people to participate in an experiment to answer directional hypotheses formulated from the survey results. The experiment will provide the participants with a wide selection of messages to choose from (instead of giving them two), that way, the research will lessen any bias in pre-selected material.

Expected Results

People have selective tendencies to choose information consistent with their beliefs. In that sense, the Internet can perhaps act as a moderator allowing people to view more inconsistent information more readily. There are various mechanisms that influence the types of exposure. People might select to watch a specific niche television show online instead of the traditional television; hence this research assesses what contributes to this selection process across mediums. In addition, it is anticipated that people will select to see advertisements on the Internet more readily than on Television, due to the ability to select the ad a person is interested in viewing.
Ferrer, Iliana and Sinta, Vinicio

Audiovisual Communication and Advertising, Universidad Autónoma de Barcelona (Spain)
Communication, Tecnológico de Monterrey (Mexico)

Perceptions of Television News Sensationalism by Spanish Audiences

Problem and research objective

The constant struggle to capture new television audiences as highly priced commodities has led to a blurring of the divides between genres, generating an ever increasing hybridization of different contents and formats. Daily prime time newscasts have entered these dynamics of production, with major television networks—both public and commercial—transforming the structure of news programs to combine information with entertainment.

The public duty of informing the masses thus competes with the organizations’ financial imperatives. The news macro-genre has been combined with the entertainment macro-genre, adopting in the way elements from fiction. This phenomenon becomes manifest not only in the inclusion of trivial topics and sensationalist frames, but also in alterations to the news structure itself, which now incorporates additional dramatic, emotional and spectacular overtones.

These frequent changes in the presentation and contents of news programs end up altering the perception that audiences have of the television networks, the newscasts and the current events in themselves. This happens even when spectators are not fully conscious of the influence of the news spectacle on democracy and other important decision making.

This work intends to point out how Spanish audiences see the spectacularization of television news, through an analysis of how they perceive this phenomenon and their opinion on features such as the use of video and editing effects, the inclusion of disturbing images, the selection of information based on emotional aspects, and the use of strategies such as the dramatization, de-contextualization and fragmentation of facts.

Method

This qualitative study, part of a wider investigation about the news spectacle in national Spanish television networks and its effects on viewers, presents the most relevant findings of a series of focus groups about the perception of information quality in newscasts from commercial networks Antena 3, Cuatro, Telecinco and La Sexta, and public broadcasting network TVE1.

Results

Through the use of qualitative methods, it was evidenced that television news can influence the spectator, generating behavioral changes that might at times be imperceptible. It is of great concern that the increasing use of infoshow elements in television news can hamper the audience’s ability to discriminate between opinion and hard facts, or between news that incorporate elements of melodrama and news that present plain facts. An audience mediated by sensationalism is unable to form a free public opinion about the relevant issues going on in their community.
Garza, Jose

Music, Texas State University

Rhythmic and Metric Analysis of Metal Music: A Bibliographic Essay

Problem

Popular music, specifically rock and its subgenres, has been a serious topic of scholarly study in the realm of music theory in recent years. However, most writings—including articles, theses, dissertations and books—address its tonal and formal aspects. Very few discuss, much less analyze, its rhythmic and metric aspects. In addition, a very small amount of the literature—whether or not it discusses rhythm or meter—deals with the genre of metal music, especially music released in the 1990s and beyond. This is problematic because many such songs contain complex rhythmic and metric material, and at the very least one can gain an appreciation for metal and its subgenres through in-depth rhythmic and metric analyses.

Methodology

I searched for relevant literature from print sources and online sources, including databases such as periodical indexes and indexes to dissertations and theses. Upon studying the found literature, I created an annotated bibliography and bibliographic essay, discussing each scholarly article and its relevance to the rhythmic and metric analysis of metal music. I organized the literature into categories for the researcher’s convenience.

Results

This bibliography, which compiles the existing materials related to rhythmic and metric analysis and metal music for the first time, provides a “go-to” resource for researchers interested not only in that field, but also for researchers whose projects are at least partially relevant. The conference presentation will give an overview of the most relevant literature on rhythmic and metric analysis of metal music.
Gong, Zijian

Media and Communication, Texas State University – San Marcos

Quality Versus Quantity: The Impact of Online Product Reviews on Customers’ Purchase Intention

Problem
This research examines whether the quality or the quantity of online reviews is more influential to potential buyers. Customers usually read online product reviews written by other buyers to get information before making a purchase online. Thus online reviews can serve as an information channel for potential buyers, which emphasized the quality aspect of online reviews. However, social proof theory suggests people assume the actions of others reflect the correct behavior for a given situation. Thus it is possible that people make purchase decisions based on the quantity of positive reviews.

The Elaboration Likelihood Model (ELM) advocates that if customers have the motivation to process the message, they will have a high involvement with the topic and a high need for cognition (NFC). In the context of online product reviews, customers with a high NFC will probably focus on the quality of related online review, because they tend to take careful consideration of the message, and resist weak and specious arguments. Conversely, customers who have a low NFC are likely to rely on the peripheral route, which means focusing on cues that are not directly related to the substance of a message. Such customers are more likely to focus on the quantity aspect of online reviews.

Consumer knowledge also has been indicated to have influence on purchase intention. Prior study shows consumers with more related knowledge can perceive differences in argument quality and source credibility of persuasive messages. In contrast, consumers with incomplete knowledge have a low cognitive ability, and are prone to be influenced by peripheral cues like the opinion of others and the number of arguments offered by the message.

Method
This study employed a 2 (quality versus quantity) x 2 (high versus low knowledge) x 2 (high versus low involvement) factorial design. A pilot study will be conducted to determine the quality of selected online reviews. An artificial quantity of reviews will be indicated on the stimulus material. Participants will finish a pretest that examines their purchase intentions (PI) and previous related knowledge, read the stimulus material, and then finish a posttest measures their PI and attitude toward the reviews (A). The anticipated sample size is 200. The data will be analyzed using multivariate analysis of covariance (MANCOVA) with the credibility of online reviews serving as covariate; A, and PI measured in the posttest serving as dependent variables; and the quality and quantity of reviews, and previous related knowledge serving as independent variables.

Expected Results
H1: Customers with a high need for cognition are more influenced by the quality of online product reviews.
H2: Customers with a low need for cognition are more influenced by the quantity of online product reviews.
H3: Customers with high related knowledge are more influenced by the quality of online product reviews.
H4: Customers with low related knowledge are more influenced by the quantity of online product reviews.
Gong, Zijian and VanDyke, Matthew

Media and Communication, Texas Tech University

The Impact of Presentation Format of Repetitive Mass Media Commercial Messages on Customers Perception and Memory

Problem

The Deepwater Horizon oil spill in the Gulf of Mexico in 2010 was undoubtedly a crisis for BP and its reputation, given the scope and media coverage of the crisis. Previous research shows that organizations with a history of similar crises are more likely to experience a threat to corporate reputation when presented with new crises. Threats to corporate reputation also increase if an organization is perceived as responsible for the crisis (Coombs, 2004). Research examining credibility and the Elaboration Likelihood Model demonstrates that credibility exerts more influence on receivers of a communicated message if they are not highly involved with an issue. Therefore, credibility plays more of a role when receiver involvement is low (Benoit, 1987; Benoit & Strathman, 2004). Based on the literature, we propose the following research questions: Can strategic communication influence perceptions of a company’s credibility if the company has a history of crisis? If so, what role does personal involvement play?

Methodology

The current study will use a 2 (no crisis history versus salient crisis history) x 2 (high versus low involvement) randomized factorial design with two manipulated exposure conditions. Participants will answer a series of pretest measures, including participant’s perceptions of the assigned energy company (including perceived responsibility of the company) and participant’s involvement (in terms of environmental concern). Participants will be randomly assigned to one of two exposure conditions, in which participants will view: 1) an advertisement from BP (an oil company with a salient crisis history); or 2) an advertisement from Chevron (an oil company with no salient crisis history). The message content in both conditions will be the same; however, the only manipulation will occur by changing the sponsoring energy company’s name as either BP or Chevron. Afterward, posttest measures will be collected to determine the perceived credibility of the assigned energy company and perceived responsibility of the company. The data will be analyzed by ANOVA, with crisis history and involvement level serving as independent variables, and perceived credibility as the dependent variable.

Expected Results

The current study makes the following hypotheses:

1. Environmentally concerned participants will have more negative perceptions of BP than of Chevron.
2a. Environmentally concerned participants will be more likely to perceive BP as less credible than Chevron.
2b. Energy company advertising will positively influence perceived credibility among participants reporting less concern for the environment.
3a. Environmentally concerned participants will be more likely to perceive BP as less socially responsible than Chevron.
3b. Participants who are less concerned about the environment will more likely perceive each energy company as responsible.
Green, Jennifer; Sarge, Melanie

Media and Communication, Texas Tech University

Can Television Commercials Prime Self-aspects?

Problem
According to the multiple self-aspects framework, the self is a collection of many situation-dependent aspects (e.g., personality traits, behavior, cultural knowledge) that are activated by environmental settings, interpersonal exchanges, and mental activity (McConnell, 2011). Once activated, self-aspects can shape current goals, attitudes and behavior.

Past research has demonstrated that mediated messages can activate self-aspects. In Chang (2010), participants viewed a magazine that included two short articles and two print advertisements. The articles were designed to activate either independent (i.e., individual-oriented) or interdependent (i.e., group-oriented) self-aspects. Chang found that these self-aspects differentially influenced participants’ attitudes towards print advertisements. Independent self-aspects led participants to have more positive attitudes towards advertisements that emphasized freedom of choice whereas interdependent self-aspects bolstered preferences for advertisements that mentioned high social approval.

The current research incorporates the multiple self-aspects framework to extend Chang 2010 by examining whether actual advertisements, rather than accompanying material, are sufficient for activating independent and interdependent self-aspects. Moreover, the current research examines whether the effect extends from print articles to 30-second television commercials.

Methodology
The first step in this direction is to identify television commercials that activate independent and interdependent self-aspects. Thus, in a pilot study participants will view 12, 30 second television commercials and rate the extent to which each one includes independent and interdependent self-aspects. These commercials will be selected from actual television commercials aired in the southwestern United States on basic cable networks within the past three years. To increase generalizability, six commercials will be for low involvement products (3 Musketeers candy bar, Wendy’s fast food, and Jimmy Dean’s breakfast items), and six will be for high involvement products (iPad, automobiles, and the Kindle Fire). Three of the low involvement and three of the high involvement commercials will depict people engaging largely in individualized activity, acting alone or as the single main character of interest, and the other three low, and high involvement commercials will depict people engaging largely in groups, interacting with each other.

Proposed Analyses
Proposed analyses include ANOVA tests to examine whether the 12 commercials were evaluated as expected. Results should reveal that, across the low involvement commercials, those that depict individualized activity should earn higher independent self-aspect scores relative to the commercials that depict group activity, and those that depict group activity should earn higher interdependent self-aspect scores. The following variables will be included as covariates: product involvement, as well as interest in, and attitudes towards the commercial and the product. The commercials with the highest independent and highest interdependent scores will then be used in follow-up studies aimed at assessing the effects of commercial-primed self-aspects on subsequent media use.
Perceptions of Pregnant Latinas in Hollywood Film

The purpose of this quantitative experiment is to discover the perception of pregnant Latina characters in Hollywood films for Latino and non-Latino audiences at Texas State University. In the absence of similar research, this experiment is significant in analyzing whether or not the constant repetition of negative portrayals, which many authors denounce, does possibly have an effect on audiences. Audience participants watched one of two short film clips and answered corresponding questions on a survey about overall perception of the pregnant character in the clip. Overall audience perception of the Latina pregnant character, regardless of the participants’ ethnic backgrounds, was more positive than the overall audience perception of the Caucasian pregnant character. Results suggested that audience emotion, evaluation and perception implies that educated college students may have a better understanding and attitude toward the roles of Latina characters in Hollywood film. This study suggests that as the portrayals of Latina characters play in Hollywood film remain similar to roles of the past, the positive perceptions from audience members are significantly noticeable regardless of audience ethnicity.

Keywords: Hollywood, Latina, perceptions, stereotypes
Haislett, Robin L

Media and Communication, Texas Tech University

The Playform of Communication: A Thematic Exploration of Video Game Culture and Those Who Game

Introduction

Video games have found their way into the hands and homes of millions. With over 72% of American households actively engaging with games (ESA, 2012), this budding medium holds the opportunity to bridge the divides between age, race, sex and other demographic identifiers. Utilizing one-on-one interviews and thematic analysis, this work explores facets of gamer culture and the cultivation of this interactive “playform,” rather than platform, of communication.

Problems explored

Using sensitizing questions relating to uses and gratifications theory through video games (Lucas & Sherry, 2004) participants are asked what they use video games for in their lives.

Areas stemming from the data collected also include the connections of video games to the current generational traits of Millennials and their characteristics such as the need for instant feedback, achievement orientation, freedom of choice in goal determination, desire for a meritocracy and other well-pronounced traits (Paul, 2012; Alsop, 2008).

Methodology

Data collection and analysis is still in progress at this time. Through volunteer interviews of over 30 professed gamers of varying levels of involvement and dedication to the medium, multiple themes are isolated and expanded upon. The participants are involved with a major university in some way. Their ages range from 18 to mid-50s and the sex ratio is slightly male-dominated at this time. More interviews are currently being collected.

The findings are supported by current work in video game and fan community scholarship. A subsequent series of focus groups will be conducted with the current participants to analyze how or if answers change and what viewpoints the informants express.

Results and Expected Results

An overwhelming number of the participants cited their primary use of video games as a platform, or “playform” of social cohesion. It is a common thread they share with their friends either online or onground and a talking point they can relate to each other with.

Other aspects of the body of work include the problematic and promising relationship games and gamer culture hold for women, the ability to create and control worlds through game participation, socialization the ludic warfare of games (Payne, 2010) and a discussion of a gamer typology exhibited from the findings.

Previous work in the exploration of video games is supported by and enhanced by the findings. This work in progress will serve as a springboard into deeper examination of the themes presented.
The theme of Stravinsky’s *Double Canon* (1959), written for string quartet, is a twelve---one row. The two violins enter canonically on two different row forms. The viola and cello also enter canonically enter on yet another two row forms. Thereby, the two pairs of instruments form a double canon. Douw (1998) identifies row forms in terms of circles of fifths and semitones, revealing relationships to a hypothetical source row. My analysis of Stravinsky’s *Double Canon* engages transformation theory to reveal relationships among row forms and groups of row forms; serial theory cannot account for these relationships. Transformation theory, as developed by Lewin (1982), reveals the network of relationships shown in Example 1. In the A section, the first two rows of Violin I are P6 and the first two rows in Violin II are P4 and P6. Beats 1 and 20 in Violin I are “Identity” as P6. In beat 5, Violin II enters two semitones below Violin I, reverting to P6 in beat 24 to complete the first network. The B section consists of the viola and cello from beats 16---38 and violins beats 37---60. The first two rows of the viola are R6 and the first two rows in the cello are R8 and R6. Beats 16 and 33 in the viola are “identity” as R6. The cello enters in beat 21 two semitones above the viola. It slides down to R6, completing the second network. This same motion is repeated in the violins from beats 37---60, making the two networks “identity.” A and B sections differ by the direction of two semitones (P6 to P4 versus R6 to R8 and RI2 to RI4). Therefore, B is the inversion of A.

**Example 1**

Based on these findings, I have gone on to analyze the networks in terms of beginning pitch---classes of each row and by axis of symmetry to find further relationships discussed in this paper.
Hirak, Charles Brent

Art Education, University of North Texas

A Soup Kitchen’s Stories: Exploring Identity and Context through Narrative Inquiry

How do stories and storytelling help to understand context, audience and storyteller? I use narrative-based inquiry to gather and examine stories from people who experience and produce the collective phenomena of a soup kitchen near Dallas, Texas. Storytelling is a way to convey knowledge and construct identity; additionally, the act of listening, collecting, co-editing and representation of stories can mesh and legitimize communities. Co-production of arts based projects help gain access to specific populations and their stories. These projects also provide opportunities for the researcher to “give back” to the community of participants. Using a Grounded Theory approach, the constant comparison of lived experience to abstractions from stories and field notes allow for new ideas, composite narratives or “soup kitchen stories” to emerge. My goals are to deepen understanding about the work of a soup kitchen, to subvert stereotypical thinking about its patrons, and to heighten awareness of self and participants by structuring identity through stories.

Keywords: grounded theory, narrative inquiry, identity, ethnography, phenomenology, reflexivity, volunteerism, homelessness.
Comprehensibility in Schoenberg’s Piano Suite Op. 25 No. 5

Comprehensibility is the extent to which valid information and inferences can be drawn from different parts of a discourse to establish a holistic understanding. Used in the aesthetic sense, comprehensibility of a musical work means that the ideas of the composer are organized in a logical way to create structural coherence. Schoenberg relates comprehensibility to form in his writing: “Form in the arts, and especially in music, aims primarily at comprehensibility.”

Furthermore, Schoenberg connects comprehensibility with twelve-tone music: “Composition with twelve tones has no other aim than comprehensibility.” Schoenberg’s assertion implies that the compositional goal of using the twelve-tone method is to portray comprehensibility, and form determines the comprehensibility of a musical work. In Schoenberg’s own words, “form means that a piece is organized; i.e. that it consists of elements functioning like those of a living organism.... The chief requirements for the creation of a comprehensible form are logic and coherence.”

My intention is to investigate the Minuet and Trio, op. 25, no. 5, for its comprehensibility. This study illustrates the structure of the Minuet and Trio in a holistic approach, which highlights the resemblance of musical structure in the traditional tonal practice. It also shows that the uses of the tone row are pertinent to the generation of structural coherence.

As the Suite for Piano (1925), op. 25, is Schoenberg’s first complete composition based entirely upon a twelve-tone row, it is vital to explore its structure in order to understand the technique that the composer used to create an extended musical form in a non-tonal medium. I focus my analysis on the component Minuet and the Trio by comparing their organizations with the minuet-trio form in a traditional tonal context. References are Caplin’s Classical Form (1998) and Schoenberg’s Fundamentals of Musical Composition (1967). These analyses explore the function of formal processes such as repetition, fragmentation, extension, and variation pertinent to the creation of form. My investigation is based on the formation of phrase structure and intrathematic relationships; it reveals that form is generated by serial techniques such as row selection, segmentation of tone row, and the formation of twelve-tone harmonies.

---


2 Ibid.

Kelly, Janiece; Guirguis, Mina; Richter, Seth

Computer Science, Texas State University – San Marcos

Stealthy Attacks on Pheromone Swarming

Problem

In multi-agent systems, digital pheromone swarming algorithms are used to coordinate between agents to achieve complex and intelligent behaviors. Studies have shown that pheromone swarming systems are versatile, efficient and resilient to failures, and thus are applicable in various scenarios such as border control, area coverage, target tracking, search and rescue, etc. Due to their reliance on wireless communication - which is vulnerable to jamming attacks - it becomes important to study the security of these systems under malicious conditions.

Results

In this project, we investigate the security of pheromone swarming under different classes of jamming attacks. In particular, we expose three new types of stealthy attacks that aim to maximize the damage inflicted on the swarm while reducing the risk of exposure. Unlike complete Denial of Service (DoS) attacks, the attacks exposed select which signal to interfere with based on the current state of the swarm. We have assessed the impact of the attacks through new metrics that expose the tradeoff between damage and cost. Our results show that the exposed attacks are more potent that traditional DoS-like attacks.

Methodology

Our results are obtained using simulation experiments and real physical implementation using a number of iRobot Create robots in our Mobile Cyber-Physical Systems lab.
Khandelwal, Priyanka and Brooks, Mary E

Media and Communication, Texas Tech University

A Comparative Analysis of the Impact of Word-of-Mouth Marketing Communication Versus Media-based Marketing Communication in Banking Decisions among Young Working Professionals

Banking industry provides the most essential economic service to masses. The fact that people invest their money with banks indicates a high level of implicit trust on their banks. What are the reasons behind this trust? How does a person choose one bank to put his money into? Is this trust impacted by the persuasiveness of the advertisements of the banks that appear in the mass media? Does the consumer acquire this trust by meticulously going through the financial statements of each candidate banks? Or does the person go by the words-of-mouth communications from his/her acquaintances? This study is an attempt to answer the above questions.

We propose to perform a comparative analysis between the word of mouth (w-o-m) marketing communication and media-based marketing communications (advertisements in print and electronic media) and how these factors influence the banking decision among the young professionals of US.

Word of mouth is the most credible, unbiased and effective mode of marketing communication (Cafferky, 1996; Hoyer & Macinnis, 2001; Kiely, 1993; Rosen 2000). Overall, face-to-face conversations have had more impact than online buzz on banking decisions. However, if a person pursues aggressive investment policies, does he/she prefer a bank that provides better investment opportunities and go against the advises of his peers?

The research question therefore is:

RQ1. To what extent does w-o-m marketing communication has an impact on the young professionals vis-a-vis media-based marketing communication?

The decision making process via w-o-m communication in this study is rooted in the themes from literature on w-o-m marketing, perception, persuasion, attitude and decision making and information processing.

Stratified random sampling strategy with strata-specific sample size depending on the strata size is employed on a target population of young professionals between the ages of 25-35 years. The strata are determined using the concept of randomized block design. The ethnicity of the population provides the strata-blocks in this design and each block is then further subdivided in three plots according to the earning status (low, middle, high income) of the population within a block. A pilot study is being conducted among the young professionals in the Lubbock city area with scope of extending the main study across the entire United States. Self - administered survey instrument is being used. The data so collected will be analyzed using the generalized linear model framework to ascertain the impact of w-o-m communication on banking decisions. Furthermore, the framework will also provide valuable insight on how ethnicity and economic status impacts one’s banking decisions. Exploratory analyses with the
data collected so far have indicated that past experience and word of mouth have been strong drivers of banking product purchases even among persons indulging in high-risk investments.

Kiambi, Dane

Media and Communication, Texas Tech University

The Role of Public Relations in Image Cultivation of Kenya in the United States

Problem

A few foreign nations have over the years hired American public relations firms to cultivate their image in the United States. In August 2009, Kenya hired Chlopak Leonard Schechter and Associates (CLS), a Washington D.C.-based public relations firm to repair its image following the 2007-2008 post-election violence in which over 1,000 people were killed, hundreds of thousands rendered homeless, and property worth millions of dollars destroyed. Informed by framing theory, this study will seek to establish any noteworthy systematic difference in the coverage of Kenya in selected U.S. media outlets between the pre-intervention and intervention periods which might then be attributed to the public relations effort.

The two year contract, obtained from the U.S. Department of Justice’s Foreign Agents Registration Act (FARA) website, cost the Kenya government $1.7 million. The nature of the contract stated that CLS is to “advice of, design of, and management of a strategic public relations and communications plan. The method of performance will be through the preparation of information in written and other media forms. The information will be disseminated in face-to-face meetings, speeches, media interviews and other related forms” (www.fara.gov).

As foreign governments continue to hire American public relations firms to help build positive reputations in the United States and world over, the question of whether it is worth paying millions of dollars from taxpayers’ money for such public relations efforts should be addressed through systematic analysis.

Methodology

A content analysis will be conducted, and the unit of analysis will be news articles of Kenya appearing in the New York Times, Washington Post, Newsweek, and CNN during the pre-intervention period (July 1, 2007-June 30, 2009) and intervention period (July 1, 2009-June 30, 2011).

Expected Results

It is expected that there will be a significant difference in the coverage of Kenya in the four U.S. media houses between the pre-intervention and intervention period. In terms of the valence, results will show that Kenya received positive coverage during the intervention period compared to the pre-intervention period when coverage of the country was negative as a result of the post-election violence.

Results will also show that there were fewer mentions of the causes of the post-election violence during the intervention period compared to the pre-intervention period. Some of the causes of the post-election that this study has so far identified were purported rigging of the presidential election, tribalism/negative ethnicity, unequal distribution of land, wealth inequality, corruption, and lack of commitment to genuine constitutional reforms by the clique in power.

In addition, results will show that there were more mentions of Kenya’s government solutions to the post-election violence during the intervention period compared to the pre-intervention. Solutions to the post-election violence that might be mentioned by the four U.S.
media houses are Kenya government’s commitment to constitutional reforms, land reform, and prosecution of the perpetrators of the post-election violence.

Korn, Matthew

Anthropology, Texas State University – San Marcos

Queer Theory and Same-Sex Marriage: A Path to Liberation?

Problem

Two important streams of thought and action have dominated lesbian, gay, bisexual, and transgender (LGBT) politics in the last few years. Those are queer theory and the rise of a renewed movement of street activism for LGBT liberation, sometimes called Stonewall 2.0. Both claim commitment to equality and liberation for LGBT individuals, but the two currents often differ on what liberation will look like and the sorts of ideas and politics by which it will be achieved. Since the start of Stonewall 2.0 in the wake of the passage of Proposition 8 in California, which outlawed the same-sex marriages that had been legalized by a California court’s decision, same-sex marriage has been a central demand of the renewed movement for LGBT rights. This has not come without criticism by queer theorists, most notably Judith Butler and Michael Warner. Queer theory’s roots in post-structuralist critique and postmodern philosophy lead many of its theorists to reject anything suggesting conformity to dominant ideals of sexuality or gender in contemporary society. For these theorists, heteronormativity threatens to collapse queer performances of gender and sex into a binary from which there can be no liberation. Therefore, demands by LGBT individuals to adopt the legal and social forms of heterosexual society is inherently damaging to the cause of liberation. The answer, according to queer theory, is a performativity of gender that erases the binary and creates new liberatory discourses.

Methodology

I will conduct a critical theoretical review of queer theory’s claims concerning heteronormativity and the binary. This will entail examining other philosophical foundations of queer theory, including the contributions of Michel Foucault, Ernesto Laclau and Chantal Mouffe. Foucault’s analysis of power concludes that oppression of LGBT people comes from the myriad discourses that condition ideas of how individuals should present their gendered selves and express their sexuality. This is combined with the identity politics of Laclau and Mouffe, articulated as a strategy for achieving liberation in an increasingly decentralized postmodern world. From this, queer theory receives much of its political agenda, including an emphasis on individualistic forms of resistance and a rejection of mass struggle based on class or other forms of solidarity between oppressed groups.

Results

The contribution of these ideas to the anti-marriage stance of many queer theorists will be shown to be an impediment to the very liberation the theory purports to further. Queer theorists make a fetish of creating alternative discourses that often do nothing to change the material or legal circumstances of LGBT lives. Though many queer theorists’ insights can further a wider understanding of sex and gender in our society, this fetishizing runs counter to both the stated desires of many LGBT activists and historical examples of successful struggles by other oppressed groups. Winning same-sex marriage is a step toward allowing queer people to
engage in whatever discourse they wish while enjoying equality under the law and the safety it brings.

**Kleitches, Larry**

Geography, Texas State University – San Marcos

Learning Geography from Crosby, Stills, and Nash: The Coconut Milk Run

The discipline of geography explores changes in patterns on the Earth, whether those patterns consist of people, weather systems, or land masses. Place, a frequently occurring concept in geography, is a form of bounded space, even if those boundaries are indeterminate. Ideally geographic data would be both acquired and transmitted through textbooks, journals, and other formalized settings. In point of fact, a great deal of geography information, as well as other forms of information, is obtained by the general public through transmitters more accessible to them, the popular media of the particular period (books, music, plays, movies, television, and the Internet).

The 1982 song ‘Southern Cross’ by Crosby, Stills, and Nash relates a voyage on a sailboat from southern California through the South Pacific taken by the song’s narrator. Unlike *Gilligan’s Island*, the song references actual geographic locations and visual phenomenon to relate its tale. This introduction has familiarized people with this area of the world, but is it an accurate familiarity?
Studies of landscapes often utilize sequential aerial photographs or satellite images that cover many years to decades. This provides a powerful foundation for analyzing not just topographical changes but other types of geographic changes as well over the period the imagery covers.

However, educators who wish to demonstrate those changes for instructional purposes require ground-based photography that pre-dates widespread aerial photography and satellite products. This type of photography is often quite expensive and difficult to find. A low-cost alternative to this during a period of tight budgets is the use of vintage picture postcards, which are relatively inexpensive and more widely available.

Disadvantages exist, however, with the use of vintage picture postcards for establishing baseline conditions in a study of geographic changes. The original photographs on which picture postcards are based were frequently modified by card publishers, such that the conditions on the cards do not represent a true view of the landscape of the period. Previously conducted research by geomorphologists utilized several examples from study sites in Glacier and Yellowstone National Parks to demonstrate likely distortions. For this presentation, the previous examples will be combined with vintage specimens from the Commonwealth of Pennsylvania and the state of Texas to illustrate examples of modifications and how to avoid misuse.
Lee, Sejin; Noh, Seungwha; Bang, Hyejin

Advertising, Kookmin University (Korea)
Advertising, University of Texas at Austin

Effective Advertising Message Strategies for eWOM in SNS: Regarding the Tie Strength, Message Characteristics and Product Involvement

This study is designed to explore the effective advertising messages for eWOM in the SNS environment which is the promising media. According to the definition for the tie strength (Frenzen and Davis, 1990), we classified Facebook as the strong tie SNS, and Twitter as the weak tie SNS. Based on those classification, we examined the effective message characteristics (factual vs. evaluative) in different types of SNS (Facebook vs. Twitter) having a difference in the tie strength. Moreover, this study also explored 3-way interaction effects of product involvement (High vs. Low), tie strength in SNS (facebook vs. twitter) and message characteristics (factual vs. evaluative) on the effect of eWOM.

The main results of this study were following. First, the interaction effects of tie strength in SNS (facebook vs. twitter) and Message characteristics (factual vs. evaluative) on eWOM were significant. Specifically, in the case of facebook, the evaluative message was more effective rather than the factual message. On the other hand, in the case of twitter, the factual message was more effective on eWOM than the evaluative one. Second, the 3-way interaction effects of involvement (High vs. Low), tie strength in SNS (facebook vs. twitter) and message characteristics (factual vs. evaluative) on the eWOM were also significant. Interestingly, the 3 way interaction effects were more salient for the low-involvement product than the high-involvement product.

Keywords: Social Networking Sites(SNS), Tie Strength, Message Characteristics, Product Involvement, eWOM,
Loff, Keli

Anthropology, Texas State University – San Marcos

Being Bilingual on the Border: Brownsville, Texas

Language is a major cultural factor along the Mexican-American border. In this paper, I will use a sociolinguistic approach to provide a better understanding of Brownsville’s bicultural identity. Brownsville borders Matamoros, Mexico along the Rio Grande River in South Texas. The city’s population is predominately Mexican-American and residents speak both English and Spanish daily. In this paper, I will explain the basis of biculturalism and the cultural factors associated with speaking two languages along the South Texas border.

In many cases speaking two languages implies growing up with two cultures. But, in Brownsville, although people are bilingual, most consider themselves members of a single culture. Brownsville residents code-switch between English and Spanish to express or emphasize thoughts or feelings. I will examine the ways in which members of the community use this code-switching to cultivate a unique Brownsville cultural identity. The information will improve our knowledge about identity formation in South Texas border communities.
MISTIC Successful Collaboration for International Speech-Language Pathology Service Delivery Model

The department of Communication Disorders at Texas State University – San Marcos and Pro-Ed Latino-america collaborated in the development of the Multicultural Intensive Speech-Language Therapy Intervention Clinic. MISTIC, an intense speech and language service delivery approach, was implemented over the course of summer 2012 to 14 participants diagnosed with special needs from México and their families.

Research questions

What are the differences and similarities between services delivered models in México and the United States of America?

How can individuals collaborate successfully in an international (México-United States of America) project to provide an effective service delivery?

Methodology or approach

MISTIC was implemented for a week for every 2 participants and their respective families. During the morning the client’s families will receive parent training while the clients were in the university clinic receiving intervention. After lunch, the clients were evaluated and their families had the opportunity to be present to ask any doubts about approaches implemented to their children. In order to identify differences and similarities between the service delivery models we will collaborate with Proed-latinoamerica in Monterrey, Nuevo León, México to compare and contrast procedures, systems, and processes of intervention. Families who will be involved in MISTIC will answer questionnaires and will provide documentation from the intervention that their child received in Mexico.

Result or expected result

Through video conferencing it was determined that the steps in collaboration resulted in successful intervention for the families. Dr. Maria Resendiz, assistant professor in the Department of Communication Disorders, and Clarissa Rodrigues, bilingual speech-language pathologist/lecturer, will provide follow-up to these families and the paraprofessionals via webconferencing technology during the coming year to adapt the intervention program when necessary. Differences between the interventions included the provider of intervention, modeling, cueing, frequency, data collected, procedure, and planning. The proposed model will
include characteristics, requirements, and regulations from Texas in the United States and from México developing a hybrid USA-MEX approach.

Luna, Ryan; Duarte, Adam; Weckerly, Floyd W

Biology, Texas State University – San Marcos

Rumen-Reticulum Characteristics, Scaling Relationships and Ontogeny in White-Tailed Deer (Odocoileus Virginianus)

Scaling relationships between body mass and gut capacity are valuable to predicting digestive efficiency. Interspecific scaling relationships between body mass and gut capacity have consistently estimated a slope of 1.0; however, intraspecific scaling relationships between body mass and gut capacity have been highly variable. We examined the influence of demands of growth and production on scaling relationships of body mass and rumen-reticulum characteristics in white-tailed deer (Odocoileus virginianus (Zimmermann, 1780)) because little is known about how juvenile and sub-adult ruminants accommodate increased digesta weights.

We sampled 108 animals over a 2-year period and assessed the influence of body mass, time of kill, crude protein (%) and acid detergent fiber (%) in the rumen, lactation, sex, and back fat on rumen-reticulum organ weight, rumen-reticulum capacity, wet weight of the digesta, and the dry weight of the digesta. Juvenile and sub-adult white-tailed deer had rumen-reticulum organ weights, capacity, and digesta weights that were similar to adults because body mass – rumen-reticulum scaling relationships all had scalars similar to 1.0. Thus, under the confines of our study, ontogeny plays only a minor role in the physiological characteristics of the rumen- reticulum and the scaling relationships of body mass and rumen-reticulum capacity.
Lyons, Emily S.; Willfarth, Cordula; Hurst, Kimberly

Journalism & Mass communication, Texas State University – San Marcos

How Religious Content in Political Campaign Advertising Affects Intention to Vote

Research Problem
A review of the literature reveals that there is a gap in political advertising research that does not measure the effects of a person’s level of religious involvement on his or her perceptions of religious content in campaign advertisements. The literature review examined several studies which analyze the differences between positive and negative advertising (Jackson, Mondak, and Huckfeldt, 2009). Past research has analyzed the role of religion in advertising and messaging from the candidates, and some studies attempt to quantify religion and measure it in terms of influence during the 2004 Presidential election (Guth, Kellstedt, Smidt, and Green, 2006). However, little recent research was found examining the effects of a person’s religious involvement on his or her perception of political campaign advertising and intention to vote.

Methodology
Using the framework of the theory of planned behavior, we developed the following hypotheses regarding level of religious involvement, religious content in campaign advertising and its effect on a person’s intention to vote:

H1: Participants with a higher level of religious involvement will be more likely to view the candidate favorably.
H2: Participants who have a favorable view of the candidate will have a higher intention to vote for the candidate.

The study surveys a sample of primarily undergraduate students at a mid-sized university in central Texas and subjects them to a political campaign video advertisement containing religious content. A questionnaire was used to measure respondents’ attitude toward the advertisement, attitude toward the candidate and intention to vote. It also captures their demographic information, including their religious affiliation and level of involvement. The questionnaire consisted of 19 questions adopted from previously used scales and 10 questions regarding general information about voting behavior, religious attendance, and demographics of respondents.

Results
Both hypotheses are supported. The results from testing H1 showed that 71% of participants who are either often or very frequently involved in religious services agree, are indifferent, or strongly agree to like the candidate. The less a participant was involved in a
religious service, the less they like the candidate. The results from testing H2 indicated that of those participants who indicated they agree or strongly agree to liking the candidate, 70% of them either agree or strongly agree that they would probably vote for this candidate. This report suggests direction for future research based on the study’s findings.

Mali, Ivana; Forstner, Michael R.J.; Wang, Hsiao-Hsuan Rose

Biology, Texas State University – San Marcos

Use of Demographic Sensitivity Analysis in Management of Freshwater Turtle Harvest

Problem: Turtles have been utilized by people for centuries (e.g., as a food source, in traditional medicine, and in the pet trade). Due to overexploitation without regard for sustainability, many living chelonians of the world are in perilous decline. The most striking recent examples come from Asia, where increasing demand for turtles in food markets has led to the collapse of a continental turtle fauna. With unregulated harvest in this region, nearly 50 species are now at risk of extinction each having seen range-wide population collapses. Despite the collapse of the wild turtle stocks across Asia, the demand for turtles in Asian turtle markets has remained strong. This is not an Asian continental issue, however, as the consequences of the trade have a planetary scope. For example, the U.S. and the state of Texas, in particular, had become a leading turtle exporter to supply the demands no longer served by native species in Asia. Recent studies show that declines in turtle abundances in Texas are likely due to overexploitation.

Approach: We used simple matrix population model of red-eared sliders (Trachemys scripta elegans) to show the level of vulnerability of turtles to additive mortality. Based on the results from the model, we discuss the effectiveness of spatial-control management system for freshwater turtles in Texas and where do turtles fit when it comes to managing them as game animals.

Results: We discuss vulnerability of turtles to additive mortality. We provide further suggestions of how sustainability of this unique evolutionary group can be achieved by comparing it with very successful strategies that have been used in delisting and even achieving sustainable harvest of American alligator (Alligator mississippiensis). By linking life histories, farming/ranching, and economic aspect of such in these two taxa, we discuss future guidelines to be followed in order to successfully utilize turtles as game animals worldwide.
Markham, Desirée

Media and Communication, Texas Tech University

Overfed and Undernourished: America’s Health Care Crisis

This creative thesis investigates the power of the food industry and how it relates to the control of the food market and production, as well as advertising and marketing.

Problem or Research Question

Due to the food industry’s influence and other misinformation from other sources, our nation, the United States is a fat, sick, and dying nation. No hostile entity could have devised a better scheme that would kill more people than the way people are dying at their own hands, with a knife and a fork.

Results or expected results

People must be educated by using excellent communication skills with scientific research to support the statements. The U.S. must become an informed nation and be able to make nutritional food choices. This creative thesis is an effort to present correct nutritional information.

Methodology or approach

The Elaboration Likelihood Model is used as the support for this persuasive communication form.
Beyond “Happily Ever After” Analysis of the Representation of Princesses in Walt Disney Movies and Their Sequels

This study was a qualitative content analysis of the portrayal of gender in all Disney princesses’ movies that have a sequel: Cinderella, The little mermaid, Beauty and the Beast, Aladdin, Pocahontas and Mulan. The main objective was to identify the representation of each princess throughout the decades. Cultural studies were used as theoretical background, especially its statement that there are no innocent messages in media. Although their main goal is to entertain, they also transmit world views. An analysis of 12 motion pictures and 12 characters was carried out. This includes the Disney Princess that appears in each film. Each character was studied from three different dimensions: physical, psychological, and sociological.

Results showed that Cinderella (1950), the oldest film with a sequel, showed the most evolution in its second part (Cinderella 2: Dreams come true, 2002). The following 4 films were: The Little Mermaid (1989), Beauty and the beast (1991), Aladdin (1992) and Pocahontas (1995), remained the same in both films despite the second part being produced several years later. Mulan (1998) was the only film whose sequel portrayed the feminine figures in a more stereotypical way that its predecessor, since she became more passive.

In general Disney has tried to give its protagonists more active characteristics, nevertheless, women in its films keep belonging to the private spaces rather than the public ones. The westernization of beauty is still very present in all of the films and sequels.

Key words: Disney, gender portrayals, cultural studies, physical profile, psychological profile, qualitative, sequel.
Mattison, Jamie

Spanish, Texas State University – San Marcos

International Teachers in Texas Public Schools: English Language Preparation for Success of Teachers from Spanish Speaking Countries

Purpose

The purpose of this study was to determine the training needs of international teachers from Spanish‐speaking countries who teach in Texas public schools. The data can be used to develop training for immigrant teachers.

Problem

Texas school districts recruit International teachers for bilingual education positions who largely are unfamiliar with American school culture. In addition, those who come from Spanish speaking countries generally do not possess advanced levels of English language proficiency. Moreover, school administrators who supervise the international teachers are usually unaware of the difficulties the teachers face. The problem is a lack of information about the international teachers’ needs that could be used to improve the teachers’ language and cultural proficiency.

Methodology

Waite developed and validated the Survey of International Teachers. The instrument consists of 34 questions in eight domains; however, this presentation focuses on only two of the domains, Language and Culture. The survey has three item types: Likert scales, close‐ended questions, and open‐ended prompts. The survey was distributed via Survey Monkey and garnered 109 respondents. I quantitatively analyzed the Likert scale items and teacher characteristics with chi‐square analyses and point biserial correlations. The written comments from the participants explained their Likert responses. I quantified the written remarks by tallying and categorizing like responses into themes.

Results

The teachers reported moderate variation of cultural differences between themselves and their students. The teachers offered comments illustrating their responses. Of the 109 respondents, 33% indicated communication gaps between the teacher and the students and 67 respondents offered written explanation of the gaps. Half (49.5%) of the international teachers reported they needed some or substantial help with language and communication. They provided clarification of the help they needed. From the data, I made recommendations for training and support of the international teachers in Texas schools.
McClarney, Kevin B

Music, Texas State University – San Marcos

A Cambridge Mass by Ralph Vaughan Williams: The Doctoral Music Examination composition that was forgotten.

The paper will discuss my research on *A Cambridge Mass*, Ralph Vaughan Williams’s musical composition and doctoral examination from 1899. I will present an introduction as well as a biography of Vaughan Williams in relation to the piece, discuss influences from other composers with examples, and discuss the scholar and conductor Alan Tongue’s discovery, editing, and premiere of the Mass that remained unnoticed in the Cambridge University library for 111 years. I will present problems faced in researching this topic, and include iconographies as well as recordings.
Merritt, Lisa

History, Texas State University – San Marcos

From Paramour to Paragon: Erasing Impropriety in Nineteenth-Century Courtesans

In her 1787 autobiography, courtesan and actress Ann Sheldon openly discusses negotiations with prospective lovers, recounting the story of a would-be protector who offered to install her “in his own house, and allow me two hundred pounds a year.” She replied with “an immediate answer, which was perfectly decisive as to the inadequacy of his proposed allowance, and the impossibility on that account, of my accepting his offer.”\(^4\) Writing a generation later, in 1825, Harriette Wilson was considerably more oblique in discussing money, asking a friend contemplating a similar offer if the gentleman in question “seemed disposed to behave well towards [you].”\(^5\) This change in language and tone regarding money is emblematic of broad changes in the dominant discourses surrounding gender roles, female sexuality, and commercialization driven by the growth of middle-class respectability and the ideology of separate spheres.\(^6\) Ann Sheldon’s open acknowledgement of the financial nature of her relationship reflects the more permissive attitudes of the late-eighteenth century. By the early-nineteenth century, when Harriette Wilson was writing, the moralism of the middle-class discourse had penetrated deep into society and affected even those outside of ‘polite society.’

This paper explores the intersection between the development of the cultural hegemony of the middle-class over the course of the late-eighteenth and early-nineteenth centuries and changes in the way elite courtesans of the period framed their own life stories. Courtesans inhabited a dangerously transgressive place in society, their very existence challenging middle-class ideals of domesticity and respectability and exacerbating anxieties about consumption. Changing gender roles, a new emphasis on domesticity and respectability, and increasingly polarized constructions of masculinity and femininity helped redefine what men should want in women, and therefore changed what made women desirable.\(^7\) As this new ideal of feminine allure spread through society, courtesans responded by embracing the image, if not the reality. “Blurring of the boundaries between the sexually transgressive and the sexually respectable,” mimicking virtue while remaining a sexual commodity.\(^8\) Their autobiographies demonstrate how these women adopted and manipulated the language of

---


\(^6\) For convenience, I am using the term ‘middle-class,’ though term that was not used with any consistency or regularity until the nineteenth century. By middle-class, I refer to the 18\(^{\text{th}}\) century notion of the ‘middling sort’ that existed between the aristocracy and the working class. For an in-depth discussion of the eighteenth-century social landscape, please see Harold Perkins, *The Origins of Modern English Society, 1780-1880*, especially pages 23-24, 61.


these new discourses to accommodate the new moral tone of society, craft a non-threatening public image, and maintain status and marketability.

Novoa, Clara and Pasham, Sujeeth

Industrial Engineering, Texas State University – San Marcos

Application for Scheduling and Balancing of Course Load for Transfer Students at the Industrial Engineering Program at Texas State

Problem or research question

An Industrial Engineering freshman or transfer student and his/her academic Advisor have several options on how to schedule the curriculum classes to take along the student college life at Texas State. One option is to minimize the variation on the number of credits the student has to take each semester. It means balancing the academic load without violating pre-requisites and other department constraints such as taking some courses only in specific semesters. In this research we develop a computer application that, given the classes a student has taken and a number of remaining semesters for graduation, it finds an optimal balanced schedule for the classes a student still needs to take.

Methodology or approach

The described problem is formulated as a linear programming model (mathematical optimization model) that resembles the Assembly Line Balancing. The exact optimal solution is found after coding the model in Xpress Mathematical Programming Software and using the Simplex Primal method. A friendly Graphical User Interface (GUI) is developed using the Xpress Application Developer (XAD) to enable the College Advisor and Student to input the desired number of semesters and select the courses to take.

Results

Using the input provided, the application internally checks for prerequisites for the selected courses, semester in which these courses are offered, and number of credits per course. In a few seconds, the application provides as output the schedule of classes the student should take each semester as well as the total number of credits per semester.
The reform movement in school mathematics curriculum since the early 80’s suggests the increase in contents and rigor of statistics. Two important curriculum documents, the Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report: A Pre-K-12 Curriculum Framework (Franklin, et al., 2007) and the Common Core State Standards in Mathematics (CCSS-M) (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010) actualize the reform by providing detail descriptions of what students should know and should be able to do in statistics. The description is based on the hypotheses of learning trajectories of statistical concepts.

There is a need to empirically understand the learning development and growth of statistical concepts, particularly those that are related to the investigation cycle in statistics (formulate questions, collect data, analyze data, and interpret results). Understanding the learning trajectories of statistics is important for instructions and assessments of statistical concepts. This study aims to contribute to the preparation of students by developing an assessment tool that will not only describe the developmental growth of statistical concepts, but it will also have the potential to serve as a research and evaluation tool to better understand statistical learning trajectories.

Using the Pre-K-12 GAISE Framework, the CCSS-M, and research on how students learn statistical concepts as the guidelines to identify the content domain of the assessment, forty items that are distributed into three test forms have been developed and pilot tested during summer 2012. The preliminary result of the pilot study will be discussed in this conference.
Okyere, Ohenewaa Asiedu

Human and Health Performance, Texas State University – San Marcos

Relationship Between Infant Feeding Methods and Growth in HIV Exposed Infants at the Korle-Bu Teaching Hospital, Ghana

Background
Infant feeding plays a major role in the growth of an individual especially in the context of Human Immunodeficiency Virus (HIV). Generally, HIV infected mothers practice three types of feeding methods; exclusive breastfeeding for three to four months followed by abrupt weaning, exclusive formula feeding and mixed feeding (a combination of breast feeding and formula feeding). Moreover, infant feeding methods are known to be closely related to infant growth. Infant growth rates are considered as fundamental and therefore must be monitored to ensure optimal growth and also help in the early detection of other disease conditions.

Aims & Objectives
This study aimed at determining the relationship between infant feeding methods and growth amongst HIV exposed infants. The objectives were to identify infant feeding methods practiced, determine factors that influenced the choice of feeding methods, find the challenges faced and determine the relationship between feeding methods and growth in the initial six months of life.

Methods
A longitudinal cohort study of HIV exposed infant-mother pair was conducted at the Korle Bu Pediatric HIV Clinic, Accra - Ghana. Structured questionnaires were used to collect data on socio-demographics, feeding practices, challenges faced by HIV infected mothers during infant feeding and illness episodes of the infants. The birth weights and serial monthly weights of the infants for the initial six months of life as well as their HIV status were documented. Repeated measures in ANOVA were used to compare the growth of infants and chi-square was used to test for association between categorical variables. SPSS version 16 was used for the analysis.

Results
In total, one hundred and thirty three (133) infant-mother pairs were recruited. Formula feeding (FF = 49.6%), exclusive breast feeding (EBF = 48.1%) and mixed feeding (MF = 2.3%) were the feeding methods practiced. Reasons significantly associated with the choice to exclusive breast feeding were breast milk seen as healthy, high cost of milk formula and avoidance of stigmatization, whereas the fear of HIV transmission through breast milk and feeding counseling by health workers were significantly associated with FF (p<0.001). The growth of HIV uninfected infants in the initial six months was significantly better than that of the HIV infected infants (p=0.023). There was no significant difference between the growth of FF infants and EBF (p= 0.592). Diarrhea was also found to be a significantly common disease among FF infants than in EBF infants (p=0.014).

Conclusion
In short, the growth rate of HIV exposed infants in the initial six months of life was similar among both the formula fed and exclusively breast fed infants and diarrhea was significantly
common among formula fed infants. Feeding counseling was significantly associated with a decision to formula feed.

Omoni, Femi; Twilliger, Josh; Ehrnstein, Jacob

Journalism & Mass Communication, Texas State University – San Marcos

The Impact of Social Media on Adolescents: A Comparative Study Among Ethnic Groups

The purpose of this study is to explore the impact of social media outlets on social behavior. Particularly, this research aims at investigating the relationship between social media consumption accessible by mobile devices and individual's patterns of socialization by comparing Hispanic and African American adolescences. The control variables are age, ethnicity, and educational level. That is, Hispanic and African American high school students between 15 and 18 years old will comprise the sample of the study. The data will be collected in a Public High School in Central Texas. A total sample of 100 is expected. Overall, the literature indicates that different ethnic groups learn to socialize with their peers in a different way, thus it is expected that Hispanic and African American adolescents utilize modern social media in different ways to build on social behaviors.
A Contradiction of Conservatism

Problem or Research Question

Texas House Bill 15, commonly referred to as the ‘Sonogram Bill,’ was passed by the Texas Legislature and signed into law by Governor Rick Perry in May of 2011. The law, which requires a sonogram and 24 hour waiting period for women seeking abortions in Texas, was met with a great deal of controversy. Proponents of the law, such as Texas Governor Rick Perry, are self-described conservatives and ostensibly supporters of limiting government interference in the lives of adults – as evidenced by their own rhetoric in regards to other legislation proposed in the same legislative session as HB15. Yet, the invasive transvaginal probe that is required by HB15 is by its very nature intrusive. This presents a contradiction within the conservative movement.

Methodology or Approach

An overview of conservative thought in the United States demonstrates that limiting the role of government in the lives of individuals is a key tenant of American conservatism. An analysis of similar legislation across the United States reveals a strong correlation between Republican majorities in state legislature and legislation intended to restrict abortion access.

Results or Expected Results

Finally, drawing on the work of Wendy Brown, I conclude that the contradiction within the conservative movement between support of limited government and support of legislation intended to restrict access to abortion, particularly in invasive ways such as those mandated by HB15, can be explained, in part, by the influence of ‘evangelical’ Christianity on both the neoconservative movement and the Republican party.
Ozel, Emrah; Brown, Donald J.; Preston, Devin B.; Forstner, Michael R. J

Biology, Texas State University – San Marcos

How do Fire Ants (Solenopsis invicta) Respond to the Changes Brought on by Last Years’ Wildfires in the Lost Pines Region of Texas

The red imported fire ant (RIFA, Solenopsis invicta) is a wide-spread invasive species originating from South America and introduced to the United States in the mid-1930's. RIFAs are an aggressive ant species with resilient population structure, and they demonstrate efficient predation over a diverse array of native invertebrate and vertebrate taxa including newly-metamorphosed toadlets of endangered Houston toad (Bufo houstonensis). The purpose of this study was to assess the effects of environmental variables such as canopy cover, prescribed burn, temperature and precipitation events on RIFA activity in the Lost Pines ecoregion of Texas where provides most of the remaining habitat for the Houston toad. We found that prescribed fire was an ineffective management strategy for controlling RIFA distribution. We did, however, find a negative correlation between canopy cover and RIFA distribution. Our data show a significant increase in RIFA activity contemporaneous to the seasonal emergence period for Houston toads.

Keywords: Red imported fire ant, Houston toad, prescribed fire, Lost Pines, Texas.
Parra, Claire and Weckerly, Floyd W

Biology-Wildlife Ecology, Texas State University – San Marcos

Body Weight and Age Influences on Liver Weight in White-Tailed Deer (Odocoileus Virginianus): Implications for Reproductive Effort

Research Question

The mammalian liver is integral to homeostasis, metabolism, and reproduction. Previous research into the liver has mainly examined liver function; there have been far fewer investigations into how liver weight is coupled to body weight, age, and reproductive events like lactation. Understanding how these variables are coupled to liver weight may be useful to understanding reproductive effort as animal age.

Methodology/Approach

I examined the scaling relationship between body weight and liver weight and the influences of age, sex, body condition (back fat), tooth wear, and lactation on liver weight to shed insight into the reproductive effort of aging white-tailed deer. White-tailed deer (62 males, 71 females) from Kerr Wildlife Management Area, Texas, and a private ranch near Hebbronville, Texas, were measured.

Results

There was an allometric relationship between body weight and liver weight. Sex and age were predictors of liver weight at Kerr WMA and sex, back fat, and lactation were significant predictors at the private ranch. Controlling for body weight, males had heavier livers than females and age was positively related to liver weight. My findings indicate that liver weight reflects metabolic and reproductive demands and that older animals can potentially invest more effort in reproduction because of larger livers. These findings might be useful to understanding senescence and terminal investment on reproduction in older deer.
Petersen, John; Scolfaro, Luisa; Myers, Thomas H

Physics, Texas State University – San Marcos

Structural and Electronic Properties of High Pressure Phases of Lead Chalcogenides

Lead chalcogenides, most notably PbTe and PbSe, have become an active area of research due to their thermoelectric properties. The high figure of merit (ZT) of these materials has brought much attention to them, due to their ability to convert waste heat into electricity. Variation in synthesis conditions gives rise to a need for analysis of structural and thermoelectric properties of these materials at different pressures. In addition to the NaCl structure at ambient conditions, lead chalcogenides have a dynamic orthorhombic (Pnma) intermediate phase and a higher pressure yet stable CsCl phase. By altering the lattice constant, we simulate the application of external pressure; this has notable effects on ground state total energy, band gap, and structural phase. Using the General Gradient Approximation (GGA) in Density Functional Theory (DFT), we calculate the phase transition pressures by finding the differences in enthalpy from total energy calculations. For each phase, elastic constants, bulk modulus, shear modulus, Young’s modulus, and hardness are calculated, using two different approaches. In addition to structural properties, we analyze the band structure and density of states at varying pressures, paying special note to thermoelectric implications.
Using Motion-Activated Cameras to Study Microhabitat Use of the Gulf Coast Kangaroo Rat (Dipodomys Compactus)

Microhabitat use by rodents has been traditionally conducted using Sherman live traps. Trapping success rates in different microhabitats presumably indicate relative use of the microhabitats. However, such data do not quantify intricate details such as the amount of time spent in different microhabitats and the rate of “visitation” to the different microhabitats. We have conducted research on a population of Gulf Coast kangaroo rats (*Dipodomys compactus*) on a private ranch in Guadalupe County, the northern edge of the species’ geographic distribution. One objective of our research is to develop a camera-based method to determine microhabitat use of *D. compactus*. We first conducted a mark-recapture study to estimate population density at three separate areas on the ranch. Based on data from 2,670 trapping nights, we obtained Schnabel density estimates of 7.4, 7.3, and 6.9 per hectare. We used cameras at these locations to investigate whether the kangaroo rats avoid areas of dense grass and woody vegetation while preferentially using relatively open areas with less grass cover. Our results provide basic ecological knowledge of this under-studied species and provide some insight on how to manage habitat for Gulf Coast kangaroo rats.
Predation-Related Chemical Cues Decrease the Activity Levels of Houston Toad (*Bufo [Anaxyrus] houstonensis*) Tadpoles

Predation is a strong ecological force that can play a significant role in shaping communities. In response to predation, many prey species have evolved predator avoidance mechanisms. One such avoidance mechanism is the detection of predation-related chemicals, or chemical cues. This mechanism of predator detection is especially important in aquatic systems.

Many anuran larvae can detect chemical cues created by the presence of aquatic invertebrate predators and consumption of conspecific and/or concurrent anurans by these same predators. The genus *Bufo* is no exception, with many species exhibiting responses to the presence (recent and current) of predators. The response typically manifests itself in the form of reduced foraging and movement activity, thereby reducing their vulnerability to movement-tracking predators, but at a cost to resource acquisition and growth. Information about the federally endangered Houston toad’s (*Bufo [Anaxyrus] houstonensis*) ecology is vital for its proper management. However, its response to predator-related chemical cues have not been thoroughly investigated, and such information would be useful in its management.

A microcosm experiment in a pseudo-laboratory setting was conducted to test *B. houstonensis* tadpoles response to chemicals released by odonate larvae. We used four chemical cues: 1) a control, 2) a kairomone cue, 3) a conspecific diet cue, and 4) a heterospecific diet cue produced from the sympatric *B. nebulifer*.

We filmed and quantified *B. houstonensis* activity levels by recording and tallying spatial/behavioral constructs we referred to as movement events and feeding events. We recorded these events in a pre-stimulus period followed by a post-stimulus period of eight minutes each. We used the difference in the proportional activity events between the two periods as a percent increase or reduction in activity events observed from the pre-stimulus period to the post-stimulus period. We termed this increase or reduction the response strength, a higher proportion indicating a stronger response. Tadpoles exposed to chemicals produced from predation exhibited a reduction in movement and feeding behavior, whereas tadpoles exposed only to kairomones exhibited no difference as compared to control group responses. *Bufo nebulifer* is sympatric with *B. houstonensis* in its home range, and sometimes their breeding seasons overlap. As *B. houstonensis* larvae are shown to exhibit the same kind of reaction to predation of *B. nebulifer* as they do to predation of conspecifics, this response may slow their development and/or lead to smaller size at maturation, increasing metamorph predation vulnerability.
Rahimi, Mehrnaz

Media and communication, Texas State University – San Marcos

Is Turkey a peacemaker in the Middle East?

Anti-regime protests fired up in Syria as it did in other countries in the Middle East and North Africa last year. But, apparently, the Syrian regime took a harsher stance and had more aggressive reactions toward its oppositions. Witnessing all bombings and genocide conducted by Bashar al-Assad regime, the incumbent French president, Nicolas Sarkozy established a group called ‘Group of Friends of Syrian People.’ It is a contact group of countries and bodies established in an attempt to find a solution to the Syrian crisis, outside the U.N. Security Council, after Russia and China vetoed a resolution on Syria there (Friends of Syria Group, 2012). The first meeting was held in Tunisia on February 24, 2012, but the second meeting took place on April 1, 2012 in Istanbul, Turkey with representatives from more than 70 countries.

Especially in the case of Syria, Turkey tries to manifest itself as a peacekeeper without any intention to interfere in its territorial integrity. As Xinhua reported on April 1, 2012, according to the Turkish Prime Minister, Recep Tayyip Erdogan, Syrian people are not fighting alone. Turkey supports Syrian people in their struggle for freedom. He added that “Turkey does not want to interfere in the domestic affairs of any country and pursue any interest, but Turkey will struggle and safeguard freedom in the region. The problem in Syria does not only affect Syria but it affects the region and the world.”

Turkish officials visited Syrian president, Bashar al-Assad at the beginning of domestic conflict in Syria and tried to convince him to refuse using military power against his freedom seeker people. Since the meeting did not yield useful consequences, the Turkish government took a sharp turn and embraced the Syrian opposition (Yetkin, 2012).

With all the adopted policies and undertaken endeavors, the main question is whether Turkey was depicted as a peacekeeper regarding Syria. This study which is a work in progress will investigate the depiction of Turkey on online news websites of The Guardian, The New York Times, and Hurriyet Daily News during March 23- April 30, 2012, around the conference of ‘Friends of Syria’ which was held in Turkey on April 1, 2012.

The three websites were selected based on purposive sampling. In this way, it would be possible to have a perspective from Turkey, Britain and the United States. In order to answer research questions, the collected articles will be analyzed by the designed coding scheme.

It is expected that the Hurriyet Daily News covered the conference and the following events more prominently than the two other news websites and put more endeavor than The Guardian and The New York Times to show Turkey as a peacemaker regarding Syria. This study
will add to the literature as it will compare news stories about foreign policy of two countries. It will be evaluated that when a country attributes good characteristics to its own activities, others will take the same steps or not.

**Razavi, Bita**

Anthropology, Texas State University – San Marcos

**Immigration and Religion: A Study of Religious Conversion among Iranian Immigrants**

**Problem or research question**

What are the motivations for religious conversion to Christianity among Iranian immigrants?

**Methodology or approach**

Study theories of religious conversion; participant observation method.

**Expected results**

Conversion of Iranian immigrants to Christianity in the US is due to availability and popularity of this religion, as well social facts such as discrimination against other religions, Iranian diaspora, and change of individual beliefs.

Most Iranian immigrants arrive in the US as Muslims. After immigration, some of these immigrants undergo religious conversion; the majority of those who convert accept Christianity as their new religion. Religious conversion, especially from Islam has been difficult, almost impossible, in the post revolution decades in Iran. In the US, freedom of religion provides an opportunity for Iranian immigrants to practice their desired religion. My study will be focused on Iranian Christian converts in the US in the past thirty years. I hypothesize that freedom of religion, relations of diaspora and assimilation, prejudice and discrimination, change of individual beliefs, and the dominance of Christian beliefs in the US have been affecting the conversion process among this community. In this paper I will discuss the demographics of Iranian immigrants, explore theories of conversion and provide information about the different motivations driving Iranian converts to Christianity.
Richter, Rachel; Simpson, Thomas R.; Green, M. Clay; Baccus, John T

Biology- Wildlife Ecology, Texas State University – San Marcos

Home Range and Habitat Use of Reintroduced Collared Peccaries the Texas Hill Country

Research Question

The collared peccary (Tayassu tajacu) is a medium sized New World ungulate with a range extending from Argentina northward into southern Arizona, New Mexico, and into central Texas. The peccary has been extirpated from much of its historic range due to habitat loss, pelt trade, and extermination. In 2004, 29 peccaries were reintroduced to Mason Mountain Wildlife Management Area in the Llano Uplift region of Texas. Since the initial release, the peccaries have increased in number and spread throughout the property. The goals of this study were to 1) determine a diurnal home range for each tagged herd, 2) describe habitat use relative to availability, and 3) assess the effectiveness of determining herd home range with a single tagged animal. To our knowledge, these goals have not been examined on reintroduced peccaries or peccaries occurring in Central Texas.

Methodology

Peccaries were outfitted with a radio transmitter ear tag and were tracked in the field until visual or audio contact was made. Home range was analyzed by calculating a 95% minimum convex polygon (MCP) for each herd. An adaptive kernel was calculated with isopleths of 95%, 75% and 50% to designate core areas. Habitat use was analyzed at the home range and site level using an existing vegetation association map. To determine the success of having a single tagged individual per herd, the MCP’s of individuals within the herd were compared to the MCP of the entire herd.

Expected Results

A total of 291 locations were collected across 6 herds. Home ranges are expected to be within the typical values reported for peccaries. Due to the tendency of herds to split into smaller subgroups, we predict that the home range of individuals will vary from the home range of their herd. This would suggest the need for multiple tagged individuals to provide an accurate estimate of home range. Although peccaries are habitat generalists, we anticipate that they will select those habitat types that provide sufficient cover and forage availability. It is our hope that the results of this study will provide useful information to aide in future reintroduction efforts.
Rivera, Marisela; Escobar, Zunny; Garcia, Neyva; Perez, Sylvia; Serrano, Emma Luisa

Communication Disorders, Texas State University – San Marcos

The Short-Term and Long-Term Outcomes of an Intensive Multicultural Speech and Language Therapy Intervention Model

This study was conducted to answer the following research question: What are the immediate and long-term outcomes of a Multicultural Intensive Speech-Language Therapy Intervention (MISTIC) model? Thirteen individuals from Mexico ages 2; 6 thru 22; 6, with distinct communication disorders participated in this study. The Multicultural Intensive Speech Language Therapy Intervention Clinic (MISTIC) model was utilized to complete initial assessments and establish individualized treatment plans for each participant. During the assessment process, preliminary goals were established. Immediate outcomes were monitored over the duration of four days of intensive assessment. During these four days, progress was determined by the increase in speech intelligibility, accurate production of target phonemes, improved language skills, and increased insight of own strengths and weaknesses for all participants. All participants demonstrated an approximate thirty percent increment in performance of all target goals. Long-term outcomes and progress data was obtained via telepractice with individual families and clinicians. Throughout this period, each participant made steady progress following the treatment plan created. Approximately two months after initial assessment, telepractice was initiated to gather data on progress made between initial assessment and follow ups. Results suggest that after two months of targeting established goals, all participants demonstrated an average of 10 to 20 percent increase in performance for each established goal. In this study, the MISTIC model was effective towards improving each participant’s speech and language abilities.

Methodology

1. Interview and collect case history
2. Establish rapport
3. Simultaneously:
   a. Conduct dynamic and standardized assessments
   b. Parent training and education
   c. Provide intervention: trial treatment
4. Review assessment results and develop goals
5. Tele-practice follow-up

2, 3, and 4 completed during a 4 day period. Monday thru Thursday 4 hours a day.

Expected results

Steady (10-20% increase per month) progress is expected in each goal
Problem

Climate change has presented Mexico with increased uncertainty and vulnerability. Mexico will have to overcome many challenges in order to adapt to changes in climatic variability. The country has historically faced large challenges in its water sector, which include drought, flooding, pollution, and lack of access to clean water. Distribution of water resources is also a major challenge for Mexico because the majority of the water reserves are not located where the population densities are found. This problem is further exacerbated by the fact that the water sector infrastructure and institutional management is outdated and inefficient. Increasingly dense urban populations add additional stress to an already over taxed system. Mexico has traditionally faced seemingly insurmountable obstacles regarding water management and the effects of climate change will only intensify the impacts on an already strained water system.

Methodology

By first presenting a complete picture of the current water stress in Mexico and the potential impacts of climate change on the water sector, a strong basis for analyzing the effectiveness of any adaptive mechanism will be created. After an analysis of the projected impacts has been presented, the evolution of water governance will be outlined in a chronological order with a brief analysis concerning the effects of new laws and policies. A focus will be placed on the Integrated Water Resource Management (IWRM) system that has slowly been put in place within the Mexican legislation and governance structure. I will explore how well the IWRM system qualifies, as a form of adaptation to climate change. Finally the discussion will lend itself to a complete analysis of whether or not the IWRM system functions effectively as an adaptive mechanism, specifically within Mexico, given the background of the water sector and future uncertainty from changes in climatic trends.

Results of Analysis

The use of the Integrated Water Resource Management (IWRM) model has helped Mexico develop the governance structure necessary to create a sustainable approach to water resources management, but it will take time to implement regulations necessary for the IWRM system to have operational status. Mexico will have to focus on improving infrastructure and increasing stakeholder involvement and social equity. The IWRM model, when fully and properly implemented will create a planned top down and bottom up approach to water resource management. Mexico requires more time for the IWRM system to be functioning effectively, however, climate change is occurring now and time is not something that the Mexican people can afford.
Sharma, Shobhit and Ceballos, Natalie

Biology, Texas State University – San Marcos

Effect of Exercise/Physical Activity on Perceived Stress and Salivary Cortisol Levels in Adolescents

Problem or research question

Previous research suggests that exercise is an effective means of coping with stress, however, the literature remains sparse with regard to studies of hormonal responses to stress and exercise among adolescents. Existing reports indicate that children and adolescents exhibit age-dependent responses to short and long-term exercise when compared to adults.

Methodology or approach

The current study examined the relationship between self-reported exercise and perceived stress (a psychological index of stress), as well as salivary cortisol levels (a physiological index of stress) in a group of 58 adolescents (30 male) ranging in age from 14 to 18 years.

Results or expected results

Although stress levels were lower overall among adolescents who reported a greater number of hours of exercise per week, this negative correlation was stronger for psychological measures of stress compared to physiological measures. When males and females were compared separately, similar trends emerged, however, results remained significant only among male participants. These findings suggest that exercise can have a beneficial physiological effect on healthy adolescents, however, the psychological effects of regular exercise may be even more pronounced.
Truong, Tri

Political Science, Texas State University – San Marcos

State Applications Act does not satisfy statutory requisite of clear and unambiguous waiver of sovereign immunity for anti-retaliation claims

Research Question

Whether a state agency’s sovereign immunity is waived under the Anti-Retaliation Law and the State Applications Act as a result of the Texas Legislature’s 2001 enactment of Section 311.034 of the Code Construction Act, which requires a statute to contain clear and unambiguous language to effectuate a waiver.

Methodology or Approach

This presentation follows the traditional approach of legal research, which requires a thorough review of applicable statutes and case precedents interpreting those statutes. To reach a conclusion, the researcher uses the legal syllogism known as IRAC, which stands for Issue, Rule, Application, and Conclusion.

Results or Expected Results

The State of Texas, its agencies, and political subdivisions enjoy immunity from suit and liability unless the Texas Legislature (“Legislature”) expressly waives immunity. When an antiretaliation claim is filed against a state agency, that agency does not have the same protection under Texas law to invoke sovereign immunity as does a municipality or other governmental subdivisions, even though the two governmental entities are governed by similar statutes—the State Applications Act (“Act”) and the Political Subdivisions Law (“PSL”), respectively.

This paper focuses on three principal cases: Barfield, Fernandez and Norman. In 1995, the Barfield court decided that the election-of-remedies provision in the PSL evidenced a waiver of governmental immunity for anti-retaliation claims against political subdivisions. Again in 2000, the Fernandez court was convinced that the Legislature had intended to waive sovereign immunity for state agencies’ violations of the Anti-Retaliation Law under the Act. A year after Fernandez, the Legislature enacted the Code Construction Act (“CCA”), which requires a statute to contain clear and unambiguous language in order to waive sovereign immunity. By now, the statutory requisite of clear and unambiguous language should have resolved the conundrum of legislative intent in construing whether a statute waives sovereign immunity.

In 2005, the Texas Supreme Court decided, in the Norman case, that the PSL no longer clearly and unambiguously waives governmental immunity of the State’s political subdivisions because the Legislature added a non-waiver provision to the law. The court, however, did not overrule its precedent in the Barfield case, but rather stated that Barfield was not controlling because it preceded the statutory amendment. Subsequently, courts have declared that Norman is inapplicable to state agencies and its divisions because they are subject to the governance of the Act. The courts also explained that the Texas Supreme Court has not overruled its decision in the Fernandez case since the addition of the Code Construction Act; therefore, the doctrine of stare decisis does not place the courts of appeals in the position to change or abrogate an established precedent.
In conclusion, Texas appellate courts are likely to find waivers of sovereign immunity of state agencies in anti-retaliation claims under the State Applications Act until the Texas Legislature provides a clear non-waiver provision in the Act.

VanDyke, Matthew and Gong, Zijian

Media and Communication, Texas Tech University

Exploring the Relationship Between Crisis History, Personal Involvement and Energy Company Credibility

Problem

The Deepwater Horizon oil spill in the Gulf of Mexico in 2010 was undoubtedly a crisis for BP and its reputation, given the scope and media coverage of the crisis. Previous research shows that organizations with a history of similar crises are more likely to experience a threat to corporate reputation when presented with new crises. Threats to corporate reputation also increase if an organization is perceived as responsible for the crisis (Coombs, 2004). Research examining credibility and the Elaboration Likelihood Model demonstrates that credibility exerts more influence on receivers of a communicated message if they are not highly involved with an issue. Therefore, credibility plays more of a role when receiver involvement is low (Benoit, 1987; Benoit & Strathman, 2004). Based on the literature, we propose the following research questions: Can strategic communication influence perceptions of a company’s credibility if the company has a history of crisis? If so, what role does personal involvement play?

Methodology

The current study will use a 2 (no crisis history versus salient crisis history) x 2 (high versus low involvement) randomized factorial design with two manipulated exposure conditions. Participants will answer a series of pretest measures, including participant’s perceptions of the assigned energy company (including perceived responsibility of the company) and participant’s involvement (in terms of environmental concern). Participants will be randomly assigned to one of two exposure conditions, in which participants will view: 1) an advertisement from BP (an oil company with a salient crisis history); or 2) an advertisement from Chevron (an oil company with no salient crisis history). The message content in both conditions will be the same; however, the only manipulation will occur by changing the sponsoring energy company’s name as either BP or Chevron. Afterward, posttest measures will be collected to determine the perceived credibility of the assigned energy company and perceived responsibility of the company. The data will be analyzed by ANOVA, with crisis history and involvement level serving as independent variables, and perceived credibility as the dependent variable.

Expected Results

The current study makes the following hypotheses:

1. Environmentally concerned participants will have more negative perceptions of BP than of Chevron.
2a. Environmentally concerned participants will be more likely to perceive BP as less credible than Chevron.
2b. Energy company advertising will positively influence perceived credibility among participants reporting less concern for the environment.
3a. Environmentally concerned participants will be more likely to perceive BP as less socially responsible than Chevron.
3b. Participants who are less concerned about the environment will more likely perceive each
energy company as responsible.

Vázquez, Amparo

Communications, Instituto Tecnologico y de Estudios Superiores de Monterrey

The Gnome in “Le Fabuleux Destin d’Amélie Poulain”: Non-communication and Games of Freedom

At twenty-five, wanting to leave back her memories of childhood dreaming with finding someone to play with, and trapped in an atmosphere of solitude, Amélie, daughter of an ex-military doctor and a neurotic teacher dead by the hit of a suicide tourist falling down Notre Dame cathedral decides to become a sort of "agent of good." As part of one of her feats, she "kidnaps" a garden gnome from the altar that his father had built for his late wife and sends it away to travel around the world. Also, walking around Paris looking for hand back to a man a memory box from his childhood, she runs into a mission that will change her life forever. This work has it focus on the game as a human subject's activity, and how in the Jean Pierre Jeunet’s film “Le Fabuleux destin d'Amélie Poulain” (2001), something that at first glance is just a joke goes beyond the original limits of its purpose and becomes into the realization of dreams of freedom. Using a three level hermeneutic analysis as a method, and making reference to the postulates of Gadamer (2000), the work reveals how a cold, distant, affected up to crumble father-daughter relationship is saved when Amélie becomes a kind of "gnome" doing "tricks" that help not only others, but her father and also herself, playing games that finally leads her to more than expected: breaking with Non-communication and achieving freedom enough to take her most important risk: dare to love.
Chytridiomycosis, a fungal disease caused by the emerging pathogen *Batrachochytrium dendrobatidis* (*Bd*), has been detected in amphibian populations in Bastrop and New Braunfels. Bastrop evaluations sought to assess the impacts to the population as a consequence of the 2011 wildfire. New Braunfels has been previously identified as a potential pathogenic outbreak site, with dead or dying frogs detected at the site prior to this study. Samples were obtained from non-consumptive toe clippings during the spring of 2012 and the presence of the disease was analyzed using a Taqman quantitative real time PCR (qPCR) assay. The presence of *Bd* was confirmed with low abundance in both areas: 3% (n=120) of the New Braunfels samples and 0.5% (n=188) of the Bastrop samples were positive. The Bastrop results contrasted those of earlier studies that reported up to 89% *Bd* positive samples in years before the fire. These results indicate the presence of *Bd* in Bastrop and New Braunfels samples as well as potential fire effects on the prevalence of *Bd* in the amphibian population in Bastrop.

Keywords: *Batrachochytrium dendrobatidis*, qPCR, toe clipping
Wallace, Derek M.; Farallo, Vincent; Buzo, Daniela; Forstner, Michael R.J

Biology, Texas State University

A Proposal for Estimating B. Houstonensis Habitat: Is There a Link Between Fragment Metrics and Local Extirpation?

The Houston Toad is a Texas endemic believed to still occur in the following counties: Austin, Bastrop, Burleson, Colorado, Lavaca, Lee, Leon, Milam and Robertson. Extirpation of B. houstonensis has occurred in the areas around the city of Houston and the last detections near the city of Houston occurred in 1976, however, as recently as the 1990’s B. houstonensis we believed to be extirpated from Burleson County until detection of a single male in 2011. It is thought that increased development (agricultural, residential, and commercial) has led to declines in amphibian populations worldwide (Phillips 1990; Carey et al. 2001), and few other areas in Texas has experienced development beyond the Houston Metropolitan area. However, increased development is not completely unique to metropolitan cities and the areas that surround cities; increased development in other areas within the B. houstonensis range likely has led to local extirpation in other counties. The Bastrop county population has been the largest and most consistently detected since the 1970’s. Surveys for the B. houstonensis during 2011 produced very few detections (at least partially consequent severe drought). To compound this low turnout, the Bastrop county fire in September 2011 impacted what remained of the B. houstonensis habitat in Bastrop County. Given the importance of this population to persistence of the species in the wild, we analyzed satellite imagery of the wildfire burn scar and compared the burn scar’s impact on the landscape to previously developed B. houstonensis habitat suitability models within Bastrop County. The extent of short-term habitat loss and degradation due to the wildfire within critical B. houstonensis habitat in Bastrop County requires that we consider extending recovery initiatives to the remaining habitat fragments across the species range while the Lost Pines Eco region recovers. Thus, locating viable habitat for a B. houstonensis population is critical for conservation of the species, but so is documenting the possible trends in habitat reduction that have occurred and are ongoing across its historic and current distribution. It is imperative that other habitat fragments within the range of B. houstonensis be assessed for suitability, and also evaluated for trends in decreased viability over time due to land conversion or other fragmentation effects.

Keywords: Habitat viability; habitat patches; habitat suitability model; endemic; extirpation.
Weyland, Desirae M.; Nice, Chris

Biology, Texas State University – San Marcos

Mechanisms of Alternative Invertebrate Reproductive Strategies: Investigations of Sympatric Species in the Genus *Asterocampa* (Nymphalidae)

Differences in insect ovipositing (egg laying) behavior, and consequences of this behavior throughout an insect’s life cycle, are of interest because they often lead to evolutionary divergence in sister insect populations. In Lepidoptera, there is great variation in clutch size and larval behavior, and a variety of hypotheses have been proposed as likely explanations for this variation. Research on these reproductive differences generally focus on allopatric species, ostensibly exposed to different ecological conditions, however, alternative strategies are maintained in sympatric species as well. The maintenance of these alternative solutions under the same ecological conditions suggests equivalent fitness of both strategies. *Asterocampa celtis* and *A. clyton* (sympatric, congeneric butterfly species) utilize remarkably contrasting egg-laying strategies, provide an ideal system to study hypotheses of clutch size variation and evolution of gregarious larvae. This study investigates mechanisms that allow alternative life history strategies to exist in *A. celtis* and *A. clyton*, despite now occurring sympatry, by (1) quantifying clutch size variation and (2) evaluating how group size affects fitness of first instar larvae.

Methodology

Gravid females of both species were caught and, then caged singly within rearing sleeves on branches of Hackberry (their host plant), until they oviposited. Clutch size, clutch number, and oviposition location were recorded. Eggs were then be clipped from leaves and kept in petri dishes until hatching. In order to evaluate whether group size affects larval fitness, first instar larvae were placed in clip cages in groups of 2, 4, 8, 16 according to species on Hackberry at capture sites. Once all individuals in the aggregation have reached the second instar, date was recorded and larvae were weighed using a digital milligram scale to be used as proxies for fitness.

Averages (±SE) of clutch size, per capita parasitism rate, larval weight, and time to 2nd instar will be calculated across species. To test for a significant difference in clutch size between species an ANOVA will be conducted both with variables of individual female nested within species. Two separate regression analyses will be conducted for the response variables of larval weight at second instar and time to reach second instar with groups size and species as predictors. In addition, a two-factor ANOVA will be used to examine if there are differences in larval weight and growth rate across species as a function of larval group size.

Expected Results

Gregarious feeding behavior may simply be an artifact of clutch size, and, in this case neither species nor group size would be significant variables in predicting larval weight or length to next instar. However, if large and/or small groups do better than intermediate size groups there is likely a fitness advantage to solitary and gregarious larval behavior. Thus larval fitness would be the driving mechanism in maintaining alternative life history strategies. Future
work may include testing of alternative hypotheses, such as comparison of parasitism rate across clutch size.

**White, Shawna**

*Journalism & Mass Communication, Texas State University – San Marcos*

The Effect of the Fear Appeal in Advertising on the Link between Motherhood and Environmental Concern

This research is concerned with several questions: do women who become mothers in turn become more concerned about the state of the Earth’s environment; does the realization that future generations will live on after a mother’s passing cause environmental action; and how can professional promoters of environmental causes best market their campaigns toward mothers? The purpose of this study is to examine the effectiveness of the fear appeal in advertising to influence the attitudes and behaviors of mothers with regard to environmental concerns, specifically the environmental threat posed by the need for disposal of plastic containers from the continuously rising consumption of bottled water. Consumer attitudes will be tested by contrasting the attitudes of a control group viewing a neutral print ad, against the attitudes of an experimental group viewing a print ad reflecting a fear appeal message. Both groups will receive a pre and post survey to measure attitudes, and the results will be examined through the lens of the theory of planned behavior.
Williams, Leilani; Zhang, Yixin; Williamson, Paula

Biology, Texas State University – San Marcos

Evaluation of Ecosystem Function of Urban Streams and Riparian Systems in Austin, Texas, USA

Restoration ecology seeks to restore function and biodiversity in ecosystems impacted by human activities. Restoration of riparian areas is a common recommendation of water management plans today and often deemed necessary to maintain ecosystem sustainability. Assessment of the condition of ecosystems is a critical prerequisite for alleviating effects of the multiple anthropogenic stresses imposed on them. For our assessment, leaf-litter decomposition is used as an integrated metric for assessing anthropogenic impacts to stream ecosystem function. To best determine the function of the ecosystem of a group of urban streams we measured leaf-litter decomposition rate of two species, Texas Red Oak (*Quercus texana*) and American Sycamore (*Platanus occidentalis*), as a response variable at those sites. We also measured macroinvertebrates from leaf packs, soil composition (including but not limited to: nutrients, organic carbon, and particle size), water chemistry, and water and air temperature.

Each variable is potentially valuable in determining stream health. This study is conducted in conjunction with the 2012 Austin Watershed Protection Department Riparian Functional Assessment and metrics resulting from both studies will be used for future monitoring and assessment of urban Austin streams. Anticipated results include inequality in stream function between reference sites and degraded sites in one or more metrics, especially leaf litter decomposition rate and macroinvertebrate assemblage. Using these studies to compare sites that have a history of disturbance (mowing, vegetation control) to sites with minimal disturbance (reference) will help guide future riparian restoration activities as well as water resource policy within the City of Austin.
Compensatory Growth in Southern Mule Deer

Research question:

Compensatory growth is the accelerated growth of an individual, after a period of poor nutrition. Studies have demonstrated compensatory growth in ungulates at high latitudes but the compensation is incomplete. Animals demonstrating full compensatory growth are able to achieve the same adult size as animals that do not experience nutritional deprivation during growth. Few studies have examined compensatory growth at low latitudes where winter weather is more amenable to animal growth. This study evaluated compensatory growth in response to nutrition and competition in southern mule deer (*Odocoileus hemionus*).

Approach:

Over the 27-year study, the dressed weight, sex, and age of 1,730 mule deer were measured from a study site in southern California. Models were then created to assess the effects that nutrition and competition have on dressed weights. We used Akaike Information Criteria to determine that a model, with predictors for sex, age, precipitation (proxy of nutrition), and a hunter-harvest index (HHI; proxy for competition) best explained the variance in dressed weight ($r^2 = 0.81$).

Results:

There was a positive relationship between precipitation and a negative relationship between HHI and dressed weights. These relationships were additive as precipitation and HHI affected dressed weights of each age class and sex the same. Our study suggests that southern mule deer that experience a nutritionally poor year can completely compensate for the weight disparity the next year given amenable biotic and abiotic conditions.