

Why Women Can't Jump: A Trend Analysis of Women Executives in the National Basketball Association from 2003-2010

Ivy Awino

Faculty Mentor: Ms. Sheena Carey, Communication Studies

Despite the fact that there is equal representation of men and women in the general labor force, it is important to understand the reasons the number of women in administrative positions is alarmingly low. Furthermore, it is important to ask why there exist entire industries predominantly occupied by males. Because women face barriers advancing through the corporate ladder, it is necessary to recognize these barriers before suggesting how to remedy the problem. I will be analyzing the trends in the hiring and retention of women into corporate executive positions within the National Basketball Association from 2003-2010. The data will be compared to the trends in the hiring and retention of women into corporate executive offices within Fortune 500 companies during the same time period. Fortune 500 companies, along with the NBA, uphold an elite status. That status should be accompanied by the need to trail blaze on issues such as gender diversity. The data comparison will particularly look at the number of women holding top administrative positions over the eight year time frame. Comparing Fortune 500 companies to the NBA, an industry heavily occupied by males, can help to identify whether women are struggling to advance due to the nature of the industry, or whether the struggle is omnipresent in a multitude of industries. Several themes emerge drawing parallels between the factors that contribute to increased representation of women on a corporate executive level.



Ivy Awino is a junior majoring in corporate communication along with minors in marketing and advertising. She enjoys music, and sports. She is a recipient of the Lloyd W. Freese, Zeta Phi Beta Sorority Inc State scholarship and Graduate NPHC of Milwaukee book scholarship. Upon graduation, Ivy would like to pursue a dual degree J.D. / M.B.A program.



Vladimir Bjelic is a senior majoring in speech pathology and audiology. Vladimir enjoys spending time with family and friends, volunteering in the community, and playing soccer. Upon graduation, he plans to pursue a master's program in communicative disorders.

Systematic Analysis of Research Pertaining to Parent Speaking Rate and its Effect on Child Stuttering

Vladimir Bjelic

Faculty Mentor: Ms. Katherine Brueck, Speech Pathology and Audiology

Use of evidence-based practice (EBP) is widely emphasized and encouraged in guiding clinical decision making in the field of speech language pathology. In the area of stuttering, numerous prevention and treatment techniques are widely accepted and utilized based upon practitioner expertise and client preference. This includes the suggested technique for parents to decrease their speech rate to decrease their child's stuttering which is consistently stated in numerous respected stuttering organization websites and printed instructional materials. A literature review was therefore completed utilizing an established systematic review to determine if there is sufficient external evidence supporting the use of this technique by EBP standards. Research design study consisting of tiered levels ranked according to quality and credibility from most to least credible and methodological quality were considered while evaluating each study. This literature review consequently included an assessment of research centering on averages of parent speech rate for both parents of children who do and do not stutter in an attempt to establish the speed at which these groups of parents speak to their children. It also investigated research documenting improved clinical outcomes with a decline in parental speech rate. Review revealed a lack of high level research and evidence to support the differences in rate between the two groups, and the use of this technique to reduce stuttering in their children. As a result, additional research, consisting of higher tiered study and increased methodological quality is necessary to establish the relationship between these variables and its prevention and treatment efficacy.



An Animal Model of Anxiety Disorder: Effects of Chronic Variable Stress on Fear

Ashley L. Bakre

Faculty Mentor: Dr. Matthew Sanders, Psychology

This project examines the effects of Chronic Variable Stress (CVS) on fear learning across developmental stages in mice, in an effort to establish an experimental model of Posttraumatic Stress Disorder (PTSD). PTSD is a debilitating condition marked by abnormal levels of fear and avoidance. Childhood trauma is a risk factor for PTSD, and the current study was designed to reveal differences in how younger and older animals respond to stressful life events. We will examine how chronic stress exposure enhances subsequent learning of a conditional fear response in mice. Our methods include the CVS model, which is a 7 day model comprised of 7 stressors that mimics the effects of traumatic events that cause fear of unpredicted chronic stressors. Chronic stressors increase the chances of PTSD, if the person experiences a later traumatic event. CVS should increase the chances of inflated fear responses, if the mouse experiences a later fear-conditioning event. With this animal model, we anticipate a higher fear reaction in juvenile mice than in the adult mice and in mice that undergo the CVS versus the controlled mice. We expect CVS to inflate fear acquisition or responding in adults. We expect juvenile animals to show an even greater effect of CVS on fear acquisition and responding. An elevated plus maze (a measure of anxiety, sensitive to the prior 7 days of CVS) will be used to determine anxiety levels. Finally, fear acquisition and conditional fear responses will be tested through a context test and tone test.

Ashley Bakre is a junior majoring in psychology with a minor in English. Ashley enjoys playing and listening to music, mentoring youth, and performing community service. Upon graduation, she plans to pursue a MA/Ph.D. program in experimental psychology.

The Institutional and Public Presidency: Scope of Presidential Influence on Civil Rights Policy from Eisenhower to Nixon

Jaimee L. Crape

Faculty Mentor: Dr. Julia Azari, Political Science

The height of the Civil Rights Movement during the 1950s and 1960s was the time when Civil Rights activists gained the most success in achieving legislative leverage from the federal government in civil rights policy. This legislative leverage in part, was possible with presidential assistance; specifically through the use of presidential discourse and executive orders. In the presidency literature, the modern or "Neustadtian" perspective, a term coined after Presidential Scholar Richard Neustadt's landmark 1960 book Presidential Power, holds that presidential power, in terms of political leadership lies not in the office's legal authority, but rather in the personal and strategic skill of individual presidents. This case study chronicles the Presidencies of Eisenhower through Nixon, and examines how these Presidents, through the use of presidential discourse and executive orders were successful (and unsuccessful) agents of change in terms of advancing civil rights in the public policy areas of nondiscrimination in employment and fair housing, and the desegregation of schools. Results of this case study indicate that presidential discourse alone was not sufficient in achieving the legislative change that eventually cumulated with the issuance of the 1964 Civil Rights Act and the 1965 Voting Rights Act. Indeed, to facilitate the process of legislative change on civil rights it was essential for presidents to take decisive executive action in addition to a strong public rhetorical stance.



Jaimee Crape is a senior double majoring in political science: law and politics and French. Jaimee enjoys reading, playing the violin, traveling, and spending time with family and friends. Upon graduation, she plans to pursue a joint J.D./Ph.D. program in political and legal theory.

Data Analysis of Amputee Gait Analysis

Vincent Dang

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Prosthetic research is growing based on the different types of prosthetic feet for trans-tibial amputees. Although there are many feet for amputees, it is often the prosthesis's recommendation that chooses which foot is best suited for each individual. Much research today focuses on gathering quantitative data in order to help amputees match with the best fit foot. This particular research focuses on three types of feet: Fusion, Ceterus and TruStep. From the experiment performed on a treadmill, angle plots and gait cycle data were gathered in order to determine which of the three feet was most symmetrical to the subject's sound limb. The long term goal of this study is to investigate shock absorption and joint rotation of the three feet. Three active, unilateral trans-tibial amputees, aged 45-55 years, were recruited for this study. Walking was performed on treadmill orientations of level, 7% incline and 7% decline, while a Vicon 524 Motion analysis system (Vicon, Lake Forest, CA) and iPecs loading device (College Park Industries, Fraser, MI) allowed quantitative data. This research paper focuses on data processing and analysis techniques from MATLAB, which included finding gait events based on velocity and plotting angles with respect to gait cycles. The use of MATLAB resulted in determining the duration of gait cycle events, which determined that one of the prosthetic feet deviated the least from the sound limb based on treadmill orientations. Functions resulting from this research will be used in experiments investigating turn negotiation and stair ascent/descent.



Vincent Dang is a junior majoring in biomedical engineering with a minor in engineering ethics and values. Vincent participates in cultural fashion shows, dancing, and enjoys reading in his spare time. After graduation, he hopes to pursue a graduate degree in biomedical engineering with an emphasis on instrumentation.



LaTasha Ellis is a junior double majoring in education and psychology. She enjoys reading, singing, and shopping. LaTasha is a recipient of the Kappa Alpha Psi Scholarship, the Jubilee Scholarship, and the Dan Jansen Scholarship. Upon graduation, she plans to pursue a Ph.D. in educational psychology with an emphasis in administration and supervision.

The Co-Occurrence of Mental Health Symptoms in Adolescents with Type 1 Diabetes and their Parents

LaTasha P. Ellis

Faculty Mentors: Dr. Astrida Kaugars and Christopher Fitzgerald, Psychology

The purpose of the present study is to examine the co-occurrence of mental health symptoms in adolescents with type 1 diabetes and their parents. We examined relationships among mental health symptoms and indicators of self-reliance. This study is important because as adolescents learn to manage type 1 diabetes mellitus (T1DM), they often experience mental health symptoms such as depression or anxiety. Also, studies show that mental health symptoms are sometimes prevalent in the parents of adolescents with T1DM. I have conducted my research using the data that has been collected from The Group Therapy Project at the Children's Hospital of Wisconsin. Group therapy is a form of psychosocial treatment, where a small group of patients meet regularly to interact and discuss problems with each other and the group leader. The goal of the group therapy sessions is for adolescents to build comfort and confidence as they learn to manage their T1DM diagnosis. There are 62 participants in this study, including the parents of the adolescents with T1DM. There were 31 adolescents and 31 parents. The adolescents and their parents completed questionnaires about their mental health symptoms. Parental scores of anxiety symptoms were not related to anxiety symptoms in adolescents. However, there was a positive relationship between the depression scores of the parents and the depression scores of the adolescents with T1DM. Self-reliance in adolescents with T1DM was not associated with anxiety in parents; however, the data suggests that if the population sample was larger than this association may have been significant.



Eduardo De La Cruz is a junior majoring in biological sciences. Eduardo enjoys playing soccer, dancing, and playing the piano. After graduation, he plans to pursue a graduate degree in biomedical sciences.

A Comparison of First vs. Second Generation Antipsychotic Drugs for the Treatment of Chronic Schizophrenia: Effectiveness and Preference

Eduardo De La Cruz

Faculty Mentor: Dr. M. Behnam Ghasemzadeh, Biomedical Sciences

Schizophrenia is a chronic mental illness in which one's process of thinking, concept of reality and emotional responsiveness are significantly diminished. In the mid 1960's, first generation "conventional" antipsychotic medications were developed to treat symptoms of chronic schizophrenia. These first generation drugs treated most symptoms of this brain disorder; however the reported side effects led to discontinuation from most medicated patients. New "atypical" second generation antipsychotics were developed in the 1990's to better treat these symptoms. However, recent studies published (Lieberman, M.D.; Keefe, Ph.D.; Selva-Vera; Terry, Ph.D.) assert that these second generation antipsychotics do not show improvement but in fact show different side effects leading to similar discontinuation from schizophrenic patients. I will be researching the literature and scholarly articles that compare the effectiveness and preference of two types of antipsychotics. It is important to consider the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study back in 2001, other trials with schizophrenic patients and recent antipsychotic drug studies. Overall, there is different effectiveness from these two types of antipsychotic medications and their preference depends on personal tolerability of the drug. Studies show better neurocognitive improvements from conventional antipsychotics drugs (Keefe, PhD), nevertheless atypical antipsychotic medications minimally improve cognitive functions such as clinical state, learning and cooperation. However different, there is no ultimate cure for the chronic symptoms of schizophrenia and neither typical nor atypical antipsychotics significantly improve these perpetual symptoms. This study assesses each type of antipsychotic medication and how these can treat schizophrenic patients without the high levels of discontinuation. It is vital to develop more effective medications for the treatment of schizophrenia symptoms which produce minimal side effects.

The Identity Formation of First Generation African Americans: An Analysis of Biculturalism

Ewune Ewane

Faculty Mentor: Dr. Ed de St. Aubin, Psychology

The initial concern of this study is to gain greater understanding about a relatively unexamined research group, first generation African Americans. The researcher defines first generation African Americans as individuals born within the United States of America who are the children of African immigrants, specifically those from Cameroon. Although the individuals of topic may give the appearance of an African American whose family has been in the United States for several generations, they are in fact very complex individuals whose closer link to their African lineage influences how they see themselves as individuals. This study is built around the models of biculturalism by William Cross and Robert Sellers. It also studies identity through personal narratives by use of the Life Story Interview of Dan McAdams. Dan McAdams, a pillar within personality psychology, argues that within an individual's narrative their identity shows its most important relations to culture and society. Previous work that has been done in the field confirms African Americans, as an entire ethnic group, experience life struggles within the United States. However these struggles vary depending upon whether immigration to the United States was voluntary or involuntary. Upon conclusion of the study, it is perceived that first generation African Americans create a personal merger within the two cultures, the United States and Cameroon, which is a unique attribute to the group's identity.



Ewune Ewane is a senior majoring in psychology with a minor in African studies. She enjoys basketball, shopping, dancing, cooking, reading, and writing. Upon graduation, Ewune hopes to pursue a Ph.D. in counseling psychology with an emphasis on cultural studies.

Discrimination and Depression among Midwest Latinos: Internal and External Coping Resources

Leticia Galindo

Faculty Mentor: Dr. Lucas Torres, Psychology

Latinos currently make up 15.4% of the total U.S. population, making them the largest ethnic minority group in the country. Previous research has identified discrimination as a pervasive stressor in the lives of U.S. Latinos, which results in poor mental health outcomes, including increases in depression. The current study examines the relationship between discrimination and depression within a stress and coping model framework among Latinos living in the Midwest. The purpose of the study was to identify which coping resources were the most predictive of depression above and beyond discrimination and typical socio demographic variables. Internal coping resources, including ethnic identity and self-efficacy, and external coping resources, including direct and indirect coping strategies were examined. Participants were recruited at Latino-based community events in a moderately sized city in the Midwest over a two year time period. Data were obtained for 469 participants using self-report measures related to the experiences of Latinos living in the U.S. The results indicate that indirect coping was the most significant predictor of depression, followed by discrimination. Both were positively related to depression. Self-efficacy was significantly and negatively related to depression. The trend in the data suggests that ethnic identity may also be negatively related to depression. Direct coping was not predictive of depression within the context of discrimination. Promoting self-efficacy and ethnic identity, while reducing indirect coping in Latinos who experience discrimination, may result in lower levels of depression. Suggestions for future research related to Latino mental health, discrimination, and coping are provided.



Leticia Galindo is a senior double majoring in psychology and Spanish language and literature. She enjoys cooking, writing, and spending time with family and friends. Leticia is getting married in May of 2011. Upon graduation, she plans to pursue a MA/Ph.D. program in clinical psychology.



Geysa Gonzalez is a senior majoring in international affairs. Her hobbies include reading, traveling, languages, movies, and history. Geysa was crowned Miss Teen U.S. Latina 2005, she was also a National Forensics League Finalist in 2007. Upon graduation, she hopes to pursue a graduate degree in international relations.

Development in the Post-Colonial Era: The Cases of Cuba, Dominican Republic and Puerto Rico

Geysa P. Gonzalez

Faculty Mentor: Dr. Michael Fleet, Political Science

Latin American countries have faced a difficult road towards development following the demise of the Spanish Empire. Scholars have argued that the lack of organizations and structures during the time of Spanish rule has made it increasingly difficult for countries to develop, though not impossible. Cuba, Dominican Republic and Puerto Rico share a similar culture, language, ethnicity, and past history as former colonies of Spain; however, each has taken a different road towards development. The purpose of this research is to better understand the challenges of political, social, and economic development in Latin America during the post-colonial period, and to identify the factors that can account for the rather substantial differences among these three particular Caribbean countries. My understanding and assessment of development leans heavily on the writing of the philosopher and economist Amartya Sen. I will attempt to explain the different levels of development achieved in these three countries by weighing and assessing the relative importance of: a) the circumstances surrounding the achievement of formal independence; b) the influence of external forces during crucial periods in the 20th century; and c) the internal factors within each of the countries, such as labor productivity, domestic leadership, and the strategies and policies adopted. My conclusion is that of the three factors, the most important is the way independence was achieved, because it has affected each country's post-colonial leadership and the external forces on which they depend.



Gabrielle Gray is a junior majoring in political science with a concentration in Latin America. She is a 2008 Urban Scholar. After graduation, she plans to pursue a Master's degree in political science or sociology.

Racial Differences among Class and Education in Brazil: The Role that Racial Classification Plays on Mobility and Educational Equality

Gabrielle L. Gray

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The Brazilian Government practices and manifests racial discriminatory policies that divide the population and destruct the idea of a racial democracy, especially through education. Through this system, the skin color and ancestry of a person sets up the position that a person is able to take in their life within that particular culture, as well as their stance in society through the separation of races and the end of the practice of a 'racial democracy'. In Brazil, the racial categories established have influenced policy on education in order to both aid the disadvantaged, as well as keep them within their designated inferior position. In this paper I will discuss the different racial categories that have been established in Brazil, the racial relations among the people, racial discrimination, and the opportunity of social mobility with respect to government policies. This paper will therefore set forth three ideas about the role that race plays in Brazilian society: 1) the racial categories in Brazil create a hierarchical class system in Brazil, which alters the concept of Brazil as a Racial Democracy 2) The strict immobility in the class system allows race and class structures to persist, and force blacks and mulattos to remain in a close range or at the same low level in society, 3) Racial discrimination is transmitted through the discrepancies between levels of education and performance in schools among different racial groups.

Charges Associated with Non-Traumatic Dental Condition Visits to Emergency Departments for Wisconsin Medicaid Enrolled Children

Maly Lor

Faculty Mentor: Dr. Christopher Okunseri, School of Dentistry

Studies have examined factors associated with non-traumatic dental condition (NTDC) visits to emergency departments (EDs) in the United States and anecdotal evidence suggests that patients with NTDC visits to EDs receive temporary care (antibiotics, pain medication, and referral to dentist), but little is known about the charges associated with NTDC visits to EDs. The study assessed charges related to NTDC visits to EDs by Wisconsin Medicaid enrolled children for the year 2003. Retrospective secondary data analysis of all Wisconsin Medicaid dental claims for children ages 0 to 18 years for NTDC visits to ED for 2003 was conducted. Descriptive statistics were performed including weighted mean to estimate the average yearly cost per person. Overall, 1,466 NTDC visits claims were processed accounting for approximately \$353,702 in charges. Amongst all children enrolled in Wisconsin Medicaid, most NTDC visits to EDs were made by those ages 0 to 5, males, whites, as well as by those who reside in non-DHPSAs and metropolitan areas. Amongst children with at least one NTDC visit claim, African-American had the highest mean charges (\$315.76) followed by those residing in partial DHPSAs (\$282.39). Children aged 14 to 18 years had a higher mean charge of (\$274.06), female (\$245.82), and those residing in metropolitan area (\$260.48). African-Americans, female, and children residing in partial DHPSA had higher mean charges related to NTDC visits to ED among enrollees with at least one claim. The study demonstrates that the Wisconsin Medicaid program incurs substantial charges for children making NTDC visits to the ED.



Maly Lor is a senior majoring in biomedical sciences. She was the recipient of the Library Circulation Aide Scholarship and enjoys volleyball and cooking. Upon graduation she plans to pursue a Ph.D. in biochemistry/chemistry.

Constant Tension: Indigenous Identity in Latin America and the Relationship with Western Concepts of Modernity

Valencia D. Lynch

Faculty Mentor: Dr. Michael Monahan, Philosophy

This paper describes a tension between the indigenous identity and European concepts of “modernity” Latin America has tried to adhere to from the colonial era to the present. Historically, many intellectuals have attempted to describe and resolve this tension, but the three I will focus on are Domingo Faustino Sarmiento, Jose Vasconcelos, and Jose Carlos Mariategui. I will also discuss the Zapatista Movement as a continuation of this discourse. Sarmiento’s views represent the widespread Eurocentric ideals present in Latin America in the post-colonial era. He argued the key to progress was to Europeanize Latin America and create standards of civilization similar to Europe’s. In contrast, Vasconcelos, advocated for a “mixture” (mestizaje) that would ultimately create a “cosmic race” (la raza cosmica) transcending any of its individual racial components. Peruvian author Mariategui offers an alternative in which indigenous people, victims of the pervasive inherited Spanish feudalism, use Marxist philosophy and politics as the key to liberation. Finally, I will turn to the Zapatistas, who, after the North American Free Trade Agreement was signed in 1994, entered this ongoing discourse in an attempt not only to end economic and political exploitation, but ultimately to affirm the identity of indigenous peoples. I will conclude by discussing the importance of maintaining a notion of “modernity” and progress that not only is permissive of indigenous culture, but challenges racist or Eurocentric ideologies which serve to oppress marginalized groups, especially indigenous people in Latin America.



Valencia Lynch is a senior majoring in anthropology and Africana Studies with a minor in theology. She is the recipient of the Hispanic Chamber of Commerce of WI Scholarship, and the Marquette University Women’s Council Scholarship. Upon graduation she plans to pursue a Master’s Degree in Latin American and Caribbean Studies.



Domonique Miller is a senior majoring in advertising and Africana Studies. She is the recipient of the Benjamin A. Gilman International Scholarship and has been on the Dean’s List. Upon graduation, she plans to pursue a Ph.D. in African American Studies with a focus on Black identity.

And the Academy Award Goes to... New and Old Generation Black Stereotypes: Backhanded Compliments and their Implications for Blacks

Domonique S. Miller

Faculty Mentor: Dr. Ana C. Garner, Journalism

Even though the Oscars have been around for 80 years, Blacks have only been nominated 58 times and awarded Oscars 13 times within the past 70 years. This study examines the Oscar-winning roles by Blacks through character analysis to determine if the roles are stereotypical. The data is then looked at through a cultural and historical lens. The Black winning roles of eleven films, from “Gone with the Wind” (1939) to “Precious” (2009), are analyzed. A description and explanation of the history of negative Black stereotypes and Blacks in films are grounded in the works of Bogle, Riggs, Guerrero, Jarrett, and others. The stereotypes examined are the Mammy, Tom, Coon, Sambo, Jezebel, Sapphire, Buck, and Welfare Queen. If Blacks are only awarded Oscars for playing stereotypical roles, then more Black actors and actresses could be more inclined to play stereotypical roles to get recognition. Hence, this study is important because it brings to light that the progress that Blacks think they have made in their roles is haunted by the stereotypical caricatures of Blacks. Works from Lee, Townsend, Ellison, and DuBois are used to illustrate how there are consequences when stereotypical Black roles are repeated and awarded. They also help explain what it means for Blacks and how they are always in a Catch 22. They can either discontinue doing what they love to do, or continue to perpetuate mocking images of their race.



Angela Melchor is a senior majoring in nursing. She is the recipient of the following scholarships: The National Association of Hispanic Nurses Scholarship, the Lake Forest Hospital Women’s Auxiliary Board Scholarship, the Home Depot Orange Scholars Scholarship and the Ignatius Scholarship for Academic Excellence. Upon graduation, she plans to pursue a Doctorate of Nursing Practice (DNP) degree.

Exploration of Hospital Discharge Instruction Comprehension by Spanish-Speaking Clients Attending a Community Clinic at First Post-Hospitalization Visit

Angela Melchor

Faculty Mentor: Dr. Ruth Ann Belknap, College of Nursing

Approximately 76% of patients who are discharged from the hospital are sent home rather than to a different health care or rehabilitation facility. Prior to discharge, health care providers present patients with discharge instructions which outline the patient’s recommended medications, self-care measures, and follow-up procedures. These instructions are designed to teach the patient how to care for him or herself after hospital discharge. In order to ensure that patients are able to make appropriate health decisions and properly perform self-care activities at home, it is imperative that patients are able to understand their discharge instructions. Although the literature suggests that patient comprehension of discharge instructions may lead to improved patient outcomes, comprehension rates continue to be significantly poor. This has been attributed to several factors including poor patient-provider communication and the low functional health literacy (FHL) of patients. Spanish-speakers, in particular, have some of the highest rates of inadequate Functional Health Literacy (FHL) and have demonstrated difficulty communicating with health care providers and understanding health information. While studies have assessed Spanish-speaking patients’ ability to comprehend written health instructions, limited research exists that examines the specific challenges that these patients encounter at discharge. This study will explore the discharge experiences and self-reported comprehension of hospital discharge instructions by Spanish-speaking clients. Further, it will examine what patient-perceived factors, if any, facilitated or impeded their ability to comprehend hospital discharge instructions. The information gathered from this study will assist health care providers in understanding and meeting the unique discharge needs of this population.

Comparing the Effectiveness of American and British Arab Lobby Groups

Affnan M. Mohammad

Faculty Mentor: Dr. McGee Young, Political Science

Interest groups play a peripheral, but important role in the formation of state policies in modern democracies. Through these lobby groups, average citizens can effectively voice their desires while influencing state decisions using direct and indirect strategies. Equipped with money, consolidated membership, and clear goals, effective lobby groups can alter the strategic political goals of entire administrations and at the same time, educate majority populations about their goals. Minority ethnic groups often use lobby groups specifically and primarily to educate the public on their respective culture. Since the latter half of the 20th century, Arabs in the United States and United Kingdom have formed organizations that represent the needs of their communities and seek to sway government decisions domestically and abroad. In this paper, I identify the role of lobby groups in modern democracies. I analyze the direct and indirect techniques they use to influence legislators while investigating the criteria of effective lobby group organizations. This work seeks to understand the ways in which minority lobby groups bridge the “knowledge-gap” between dominant and subordinate groups in democratic societies. Analyzing the history and organization of the American-Arab Anti-Discrimination Committee and the Council of Arab-British Understanding, I seek to identify the effectiveness of the Arab lobby organizations in America and Britain.



Affnan Mohammad is a senior majoring in political science and Middle Eastern affairs. She is the recipient of the Ignatius Scholarship for Academic Excellence, the Magis Scholarship for Leadership, the Center for Global Understanding Scholarship, the Gesu Parish Peacemaker Award and has been on the College of Arts and Sciences Dean’s List. Upon graduation, she plans to pursue a JD/M.A. in Middle Eastern Affairs.

Sino-African Relations: An Assessment of Influence and Dependency

Monai Myles

Faculty Mentor: Dr. Julia Azari, Political Science

The strategic foreign policy of China in Africa is challenging and impressive, yet considered ominous by the West. Chinese leader Hu Jintao searches for new avenues to implement an ostensibly “win-win” economic partnership and fulfill the goal of consolidating economic interests. Africa is a land of trade opportunities, providing natural resources and in return, China contributes to Africa’s infrastructure, manufacturing, and oil sector. Scholars have both criticized and praised Chinese influence in the continent. Western critics have discussed the lack of concern the Chinese government has for human rights and democracy because they instead follow a foreign policy of respecting the sovereignty of nations, while others dedicate a large part of Africa’s recent growth to Chinese trade in the region. The relationship at best is complex, yet the ambivalent nature of Sino-African relations must be assessed. Does China take part in its relation with Africa as a partner, competitor, or exploiter? Africa should remove itself from a situation in which it becomes dependent upon a foreign power—in this case, China. I will briefly analyze Sino-African relations, then explore whether China influences and generates a network of African countries that are dependent upon Chinese economic and political power. My research will utilize a data analysis of 27 African countries and a case study analysis of South Africa and Zimbabwe. Results indicate a correlation between Chinese trade relations with countries that have poor political rights and civil liberties.



Monai Myles is a senior majoring in international affairs and Spanish. She is the recipient of the Benjamin A. Gilman International Scholarship and has studied abroad for a year in Madrid, Spain. Upon graduation she plans to pursue a Ph.D. in comparative politics with a regional focus on Africa.



Christopher Powell is a senior majoring in criminology and law studies with a minor in Spanish. He is the recipient of the Ethnic Alumni Association’s Ralph H. Metcalfe Sr. Scholarship and has been on the Dean’s List. He enjoys drawing, creative writing, and playing the piano. Christopher plans on pursuing a Ph.D. in Criminology or sociology with a focus on deviance.

Hate Crime in Wisconsin: An Analysis of Bias-Motivated Crimes in Wisconsin from 1991-2008

Christopher E. Powell

Faculty Mentor: Dr. Olga Semukhina, Criminology and Law Studies

With the passage of the Hate Crimes Statistics Act of 1990, every state has since been required to implement systems for collecting data on reported hate crimes from their component law enforcement jurisdictions. In this paper, the author describes the collection of such data and limitations historically and currently faced by law enforcement agencies striving to fulfill the HCSA’s requirements. The author further examines hate crime reports in Wisconsin from the years of available data (1991-2008) as provided by the annual Crime and Arrest Reports archived by the Wisconsin OJA (Office of Justice Assistance). The information in these annual reports was compiled in order to determine the frequency and type of hate crimes, as well as general trends in their reported occurrence over time. Data are presented first as the sum total of yearly incidents. Then they are broken down into categories of bias motivation, which are Race, Religion, Sexual Orientation, and Disability. Though some statistical methods are ruled out by the low number of years with accessible hate crime data, general trends are observed and presented graphically with the aid of SPSS (Statistical Packaging for the Social Sciences) software. Given the limited scope of the present research, the author does not offer firm conclusions as to the causes of variations observed in the data, but rather notes these as fertile grounds for future research on hate crimes and hate crime data collection.



Localization of Dorsal in drop-dead (*drd*^{X1}) embryos of *Drosophila*

Francisco R. Nava

Faculty Mentor: Dr. Edward Blumenthal, Biological Sciences

Mutations in the fruit fly gene drop-dead (*drd*) cause adult lethality, severe neurodegeneration, digestive defects, dwarfed body size, and female sterility. Characterizing the full phenotypic array of *drd* is central to understanding such an unusual gene that participates in several different physiological functions. Investigations into female sterility of *drd* mutants have suggested that the *drd* gene is expressed in the female follicle cells which are responsible for contributing to the maturation and proper development of the embryo. One of the functions of the follicle cell is to initiate the biochemical pathway leading to the activation of the protein Dorsal, a morphogen that is essential in determining the dorsal-ventral polarity of the embryo in the syncytial blastoderm stage. Unpublished findings have suggested that drop dead mutant embryos are arresting prior to gastrulation. Hence, this study tests whether or not *drd* mutant embryos display an abnormal localization of Dorsal at a key developmental point before gastrulation. Mutant (*drd*^{X1}) and sibling control embryos were collected, dechorionated, and heat fixed before being stained by Dorsal antibody. Embryos were viewed through fluorescence microscopy. Preliminary findings indicate that none of the examined mutant embryo had attained the syncytial blastoderm stage or showed any characteristic migration of nuclei to the embryo periphery. Heterozygote control embryos showed a normal gradient of Dorsal in the peripheral nuclei. Given the role of Dorsal in the dorsal-ventral orientation of the developing embryo, these preliminary results leave open the possibility that the *drop-dead* gene may be essential for dorsal-ventral polarity.

Francisco Nava is double majoring in Political Science and Biological Sciences. He is the recipient of 2010 Distinguished Service Award in Peer Education for his work as chairman of the Student Conduct Board. Francisco enjoys languages and speaks Spanish, Russian, Greek and Latin. Upon graduation, he plans to pursue Ph.D. in biochemistry or pharmacology.

Organic Dyes: Researching a Viable Replacement for Other Forms of Energy

Maurice A. Sharpe, Jr.

Faculty Mentor: Dr. Rajendra Rathore, Chemistry

Until 1997, when scientist spoke of solar power, they were essentially speaking of a silicon-based system where two types of silicon, negative and positive, would meet and when exposed to sunlight would cause a current to be generated. That current was generated through a photoelectric reaction which produced an electron and a “hole.” This concept was then applied to other transition metals and multi-junction systems were developed. These systems had a broad range of light absorption leading to higher output; however, the number of materials needed made this more expensive. Gratzel (1997), developed a new type of cell where organic molecules or “dyes,” would be used to generate electricity through the same “hole” concept. The difference between this type of cell and others was the variety of materials used in this reaction, and as a result many new types of dyes are being developed. In this research, several organic dyes were studied. From this understanding, a new organic dye, 4-t-butyl-Hexa-peri-hexabenzylcoronene was tested. Testing occurred in a real world setting through constructing a solar cell. These results would then be compared to a “basic” solar cell whose dye –blackberry - would be items easily purchased at a grocery store. This new dye would also be tested against the results of some the other currently researched dyes.



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The Enslaved Woman and the Video Model: Parallels of Subordination and Commodification

Simone L. Smith

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In 2002, *Essence* magazine launched its article series “War on our Girls” in which writers discussed what they believe to be threats to young Black women in the United States. One of the first issues addressed was the deliberate commodification of women in commercial rap videos. Commodification and misogyny in rap videos have been the topic of much discussion at hip hop summits. Many fail to realize that the problem at hand has deeper roots than the word “bitch” sprinkled across a beat or curvaceous girls leaning seductively on Lamborghinis in a music video. The rapper/video model relationship parallels slave-master relationship prevalent in the antebellum South. Degrading terms used to subordinate black women and justify their mistreatment, the specific market for racially exotic women and the means used to exploit women are blatant. From this one can gather that the subordination of Black women ultimately leads to their commodification. My paper uses Adrienne Davis’ description of a sexual economy based on pleasure, profit, and punishment as a theoretical model and rapper 50 Cent’s video “P.I.M.P” in which he makes use of all of the ideas presented. In her M.A thesis “Modern Day Jezebel: A Social Critique of Confessions of a Video Vixen, Using Patricia Hill Collins’ Feminist Theory”, Megan Dawnavette Ford already lays the foundation for this discussion, by asserting that video models such as Karrine Steffans are modern day Jezebels, and that video models’ commodification has historical roots.

Neuroanatomical Origins of Glutamatergic Input to the Hypothalamic Paraventricular Nucleus: Mapping Neurons Dual-Labeled For Retrograde Tracer and VGLUT3 mRNA

Alejandra C. Villalaz

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Hypothalamic-pituitary-adrenocortical (HPA) stress responses are mediated by brain systems that detect stressful stimuli and activate the hypothalamic paraventricular nucleus (PVN). Different stressors, either physiological or psychological, are detected by different neuroanatomical pathways and involve different neurochemicals. Pathways that respond to physiological stressors (e.g. hypotension, hemorrhage) have been intensively studied, with the primary system being brainstem noradrenergic input to PVN. Pathways mediating HPA responses to “psychological” stressors, e.g. novel environment, social stress (aggression) are unclear. Previous studies show that the neurotransmitters glutamate and GABA are important excitatory/inhibitory signals in the PVN, but the neuroanatomical origins of this input are unknown. By combining retrograde tract-tracing and in situ hybridization for genetic (mRNA) markers of glutamate and GABA neurons, this study will identify dual-labeled neurons as PVN-projecting and either glutamatergic or GABAergic, and will yield a map of brain regions containing these dual-labeled neurons. Specifically, neuronal cell bodies will be determined to be PVN-projecting via immunoreactivity for Fluorogold, a retrograde tracer molecule injected into the PVH. Those neurons will be deemed to be glutamatergic or GABAergic based on detection of mRNA expression for either vesicular glutamate transporters or glutamic acid decarboxylase (GAD), the enzyme that synthesizes GABA. In each brain region examined, the location of FG-only or dual-labeled neurons (FG/VGLUT or FG/GAD) will be mapped. Results will lend insight into stress neurocircuitry and could shed light on the neural basis of psychiatric disorders (e.g. Depression, PTSD), which involve abnormally high or low HPA axis activity and stress hormone levels.



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