Fifteenth Annual CSBS Student Research Conference Program, April 12, 2008

University of Northern Iowa

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Conference Program & Published Abstracts

The 15th Annual UNI College of Social and Behavioral Sciences Student Research Conference

University of Northern Iowa

April 12, 2008
Schindler Education Center
University of Northern Iowa
Cedar Falls, Iowa
Greetings!

Welcome to the conference. We are pleased to provide students with the opportunity to display their work. These students have been actively involved with these projects throughout the academic year and have produced outstanding projects of high caliber. It is our pleasure to have you visit our campus and participate in a day full of academic and scholarly activities. We hope that you have a great experience meeting new people, exchanging ideas, and finding out what students have been working on.

Research projects need strong leadership and we would like to thank the faculty advisors for their assistance and dedication to undergraduate and graduate education.

We would also like to thank the College of Social and Behavioral Sciences, the UNI faculty, the Psychology Club, and Northern Iowa Family Services Organization, for all of their hard work as moderators, volunteers, and judges.

To learn more about the conference, visit the website:
http://www.uni.edu/psych/csbs_conf/csbs_main.htm

Enjoy the Conference!

The Conference Committee:
Amanda Bakeris, Conference Coordinator
Betty Bagenstos, Conference Staff
Dr. Kim MacLin, Event Chair
The University of Northern Iowa
Psychology Club

is proud to announce

Adam Butler

as winner of the

2007-2008
Psychology Club
Excellence in Teaching Award

for his outstanding service to the psychology students of UNI.

He was voted winner of the award for his exemplary performance in areas including approachability, guidance, enthusiasm, versatility, organization, and challenging classroom standards.

Visit us online at:
http://www.uni.edu/psych/club
PROGRAM

Poster Setup – Schindler Lobby (Please have posters up by 9:00AM) 8:00am-9:00am

Onsite Registration & Breakfast - Schindler Lobby 8:00am-9:00am

Welcome & Opening Remarks- Room 244-245 9:00am-9:15am
Opening Remarks by Department Head of Psychology, Kim MacLin
University of Northern Iowa

Keynote Speaker - Room 244-245 9:15am-10:15am
Dr. Ed de St. Aubin
Hegemonic control and self determination: social and individual forces in the lives of lesbians

Break 10:15am-10:30am

Panel Sessions:

Finding a Job with a B.A. in the Social and Behavioral Sciences 10:30am-11:45am
Room 244-245

Graduate School: What's It Like and How Do I Get There? 10:30am-11:45am
Room 247

Lunch (Schindler Lobby) & Faculty Research Highlights Rooms 244-245, 246 & 247 12:00pm-1:00pm
*Please take lunch & enjoy faculty highlights

Poster Presentations 1:00pm-2:30pm

Poster Awards & Closing Remarks 2:30pm-3:00pm

Remove Posters 3:00pm

Note: UNI students wishing to receive extra credit for attending should sign both morning and afternoon attendance sheets located at the registration desk.
FACULTY RESEARCH HIGHLIGHTS

Please bring lunch and enjoy presentations.
12:00pm-1:00pm

ROOM 244-245

Sociology, Criminology, Anthropology
   Marybeth Stalp
   Dawn Rothe
   Christopher Mullins

Psychology
   Seth Brown

ROOM 246

Political Science
   Christopher Larimer

ROOM 247

Design, Textiles, Gerontology & Family Studies
   Michael Fleming
   Annette Lynch
PANEL DISCUSSION
Finding a Job with a B.A.
In the Social and Behavioral Sciences
Panel Moderator: Amy Unruh, Program Assistant, Career Services
Room: 244-245
10:30am-12:00pm

Adriane Carlson
Assistant Director of Family and Children's Council, Waterloo IA
B.A. in Family Services, University of Northern Iowa

Amber Jedlicka
Director of landmark commons
Friendship Village, Cedar Falls IA
B.A. in Family Services, Certificate in Gerontology, University of Northern Iowa
Completed Requirements to be a licensed long-term-care administrator
PANEL DISCUSSION
Graduate School: What's It Like and How Do I Get There?
Panel Moderator: Elaine Eshbaugh, Ph.D: Asst Professor, Design, Textiles, Gero, & Family Studies
Room: 247
10:30am-12:00pm

Marissa Arnett University of Northern Iowa
Program: 1st year Clinical Psychology
B.A. in Science of Psychology, Xavier University of Louisiana

Benjamin Bristow University of Northern Iowa
Program: 3rd year Ed.S. School Psychology
B.A. in Psychology, University of Northern Iowa

Erica Spies University of Iowa
Program: M.S. Community & Behavioral Health, College of Public Health
B.A. in Family Services, University of Northern Iowa

Stephaine Strouse University of Northern Iowa
Program: 1st year M.A/Ed.S. School Psychology
B.A Psychology, University of Northern Iowa
POSTER PRESENTATIONS
Posters will be located at stations with numbers corresponding to those below.
Available: 9:00am-2:30pm
Authors Available: 1:00pm-2:30pm

1. An Investigation of Beauty Pageants
Bethany Grieser
University of Northern Iowa
Faculty Advisor: Marybeth Stalp, Ph.D.

Abstract:
In this study I am examining how and why girls and women have participated in beauty pageants in the United States. Through qualitative interviews with adult women, I will look at the role body image, gender, and the concept of beauty play in beauty pageants in the lives of those individuals who participate in beauty pageants. The interview questions were self-generated after reviewing relevant research. The findings of this study indicate new insights into beauty pageants and the people who participate in them.

2. Attitudes Toward Abortion and Risky Behaviors in Midwestern College Students
Ashley Andrew
University of Northern Iowa
Faculty Advisor: Elaine Eshbaugh, Ph.D., CFLE

Abstract
Issues regarding sexual health have an impact on society, and they should be addressed to save and improve lives (Satcher, 2001). This study explores the correlates of person's attitudes toward abortion. Adolescents are more likely than adults to engage in unprotected sex (Gardner & Steinberg, 2005), a risky behavior according to Byrnes, Miller, & Schafer (1999). Clearly, unprotected sex may lead to unwanted pregnancies, with a possible outcome to an unwanted pregnancy being abortion. Although we consider adolescents a population most at-risk for unprotected sex, women over the age of twenty account for eighty percent of the total induced abortions in the United States (Satcher, 2001). Considering these statistics, I was interested in the attitudes of college-aged individuals toward abortion, a potential outcome of unprotected sex. My predictions were that individuals who have a "Pro-Choice" attitude toward abortion will also be more willing to seek excitement, to desire to engage in risky behaviors, and to seek arousing sensations. These hypotheses were tested using bivariate correlations. Four measures were used in this study. Attitudes toward abortion were assessed using Hess's (2005) Survey of Student Attitudes Towards Abortion. Excitement seeking was measured using the Revised NEO Personality Inventory (NEO-PI-R; Costa and McCrae; 1992). Thrill and Adventure Seeking and Experience Seeking by Zuckerman (1994) were used to measure the desire to engage in risky activities and the desire to seek arousing sensations. The results of the study indicate that, as hypothesized, pro-choice attitudes are significantly positively correlated with experience seeking. However, the desires to...
engage in risky behaviors and seek arousing sensations were not associated with abortion attitudes. Further research should investigate similar hypotheses with more diverse samples, such as non-college students.

3. Patterns of Gender-Based In-Group Bias in Middle Childhood
Ashley Andrew, Ryan Puhrmann
University of Northern Iowa
Faculty Advisor: Joshua Susskind, Ph.D.
Abstract
Following previous social psychological research, this study focuses on patterns of gender-based in-group biases as found in middle childhood. Middle childhood is the age in which behavioral evidence supports that same-sex preferences are at their peak (Maccoby, 1988). This research is based on Social Identity Theory (Tajfel & Turner, 1986), which states people have the need for a positive social identity. Therefore, people are motivated to think more positively about their own group in comparison to other groups. It has been found that children portray their own group as more positive and less negative than other groups (Powlishta, Serbin, Doyle, & White, 1994), and both boys and girls believe they have more positive traits than the opposite sex (Powlishta, 1995). It has also been found that girls show more of a positive bias than boys (Powlishta et al., 1994; Susskind & Hodges, 2007). The purpose of this study is two-fold: to explore whether in-group positivity necessarily implies out-group negativity and if social identity theory's positive distinctiveness tenet can help explain gender differences in the amount of bias displayed by both genders. Children will be asked to complete two surveys concerning 38 positive and negative traits used in similar studies (Powlishta, 1995; Susskind & Hodges, 2007). The investigation takes place on two separate days, both of which the children are asked to complete a questionnaire. The first portion of the study measures how important it is for members of the participant's gender to have, or avoid having, each trait if they wish to feel good about themselves. The second portion of the study measures participants' perception of the extent to which each trait is associated with each gender. This methodology allows participants to express assignments of traits to both or neither gender.

4. Children's Preferences for Novel Occupations: Status' and Gender Roles' Influence
Andrew Q. Morse, Ryan Puhrmann, Ashley Andrew
University of Northern Iowa
Faculty Advisor: Joshua Susskind, Ph.D.
Abstract
According to Gottfredson's (1981, 1996), 6-to-8-year-olds focus on the occupation gender roles and not status in forming their career aspirations. Previous research regarding children's occupational preferences found that boys hold more rigid preferences in terms of occupational gender roles than do girls (see Helwig, 1998 for a review). However, these studies typically confound gender roles and occupational status as few feminine jobs are among the highest status occupations. When Teig and
Susskind (in press) systematically varied the gender roles and status of the occupations, both boys and girls preferred traditional to gender-incongruent occupations. However, the boys attended to both the status and gender roles of the occupations whereas the girls attended to status only within masculine occupations. As only two occupations were presented by Teig and Susskind in each gender role by status category, it is possible that their results were not due to either the status or gender roles of the occupations but instead due to other features of those specific jobs. To account for this in the current research, 6-to-8-year-old children were presented with novel occupations where the gender roles and status of the occupations were systematically varied. Twenty-two 6-to-8-year-olds were shown a list of 18 novel occupations where the status (low, moderate and high) and gender roles (masculine, feminine or gender neutral) of the occupations were varied. The children were asked to rate their preferences for the jobs. It was expected that: the children would base their preferences more on the gender roles than the status of the occupations and boys would hold more rigid gender role-based preferences than would girls.

The children’s preferences were analyzed in a 2 (participant gender) x 3 (occupational gender role) x 3 (occupational status) mixed ANOVA. The main effect for status was significant, F(2,40) = 3.66, p < .05, as children preferred high (M=3.08) to low status (M=2.52) jobs. Furthermore, the interaction between status and occupational gender role was significant, F(4,80) = 2.74, p < .05. The children preferred the high status masculine jobs (M=3.50) to the low status neutral (M=2.41), low status masculine (M=2.43) and moderate status masculine (M=2.52) jobs.

5. Is America Ready for a Black Presidential Candidate? A Study of Race, Argument Strength and Political Orientation

Duoc V. Nguyen, Taylor W. Wadian
University of Northern Iowa
Faculty Advisor: Helen Harton, Ph.D.

Abstract

Dovidio and Gaertner’s (1998) Integrated Model of Racism states that liberals desire to be egalitarian, yet still show bias unconsciously towards minorities resulting in conflicting feelings about race that sometimes lead to overcompensation (aversive racism). Conservatives, on the other hand, tend to conceal their prejudices due to societal norms (modern racism). In this study, we applied this model to attitudes toward a potential presidential candidate, varying the quality of the candidate’s arguments (cf. Petty & Cacioppo, 1981). We hypothesized that White conservatives will rate the White candidate more positively regardless of argument strength. White liberals are expected to overcompensate and rate a Black candidate more positively than a White candidate when argument quality is strong; however, when arguments are weak, liberals should rate the Black candidate less positively using the candidate's arguments as an “excuse.” 190 White community members (M age = 43.49) read a flyer describing a White or Black presidential candidate who advocated or criticized universal healthcare with strong or weak arguments. They then reported their attitudes toward the candidate and completed political orientation measures and demographic items. Controlling for demographics, we found a marginally significant interaction of ethnicity, argument strength, and participant
political orientation ($\chi^2 = .05, p < .08$). As expected, conservatives rated the White candidate with strong arguments more positively than did liberals or moderates and more positively than they rated the Black/strong argument candidate. When the candidate was Black, however, argument quality did not matter. Conservatives rated the Black candidates equally regardless of argument strength (and more highly than the White/weak argument candidate), and liberals tended to rate the Black candidate more positively when he gave weak arguments than when he gave strong ones. The results indicated that the Black candidate was rated similarly (and neutrally) regardless of political orientation or the strength of his arguments. This finding suggests that White Americans may be reluctant, even on anonymous questionnaires, to negatively evaluate a Black candidate or to distinguish him through the strength or content of his arguments.

6. Life Events and Menarche
Meghan Gillette, Ivan Tasovski
University of Northern Iowa
Faculty Advisor: Cathy DeSoto, Ph.D.

Abstract
This project focuses on what life events occur at or before menarche, or a female's first menstrual period. The issue is significant because in 1850, the average age of menarche was 17; in 2000, the average age was 12. Scientists have attributed many events or conditions to the decreasing age of menarche, such as exposure to cigarette smoke, chemicals, and hormones in meat and milk. Divorce, death in the family, father absence in the home, and excessive physical exercise has also been attributed to an earlier age at menarche. In order to understand which of these factors may be most significant, 75 University of Northern Iowa female students were surveyed about such life events at the time of their first menstrual period. They were also given a second survey concerning their mother's and maternal grandmother's life events at first menarche, which was returned after having spoken with their mother and grandmother. This second survey was compared to the original surveys to find possible trends in life events at menarche across the generations.

7. Surrendering Freedom: Effects of Personality Variables and Perceptions of Terrorism
Taylor Wadian, Coutney Stufflebeam, Melissa Duke, Brian Scmidtke, Traci Priebe
University of Northern Iowa
Faculty Advisor: Helen Harton, Ph.D.

Abstract
After the 9/11 attacks, government officials took action to "protect" Americans from an imminent threat to the American way of life. This study examines individual differences in a person's willingness to surrender freedoms endangered by these government actions. We hypothesized that pessimism, feelings of powerlessness, and interpersonal trust would be correlated with an increased willingness to sacrifice personal freedoms and that
this relationship would be mediated by an increase in perceived risk due to events such as 9/11.

200 college students completed questionnaires in a counterbalanced order, including measures of optimism (Scheier et al., 1994), powerlessness (Zeller et al., 1980), and interpersonal trust (Hochreich & Rotter, 1970). Participants also rated items assessing perceived likelihood of a terrorist attack in the next two or ten years on a probability scale of 0 to 100% and a 20-item scale measuring willingness to sacrifice personal freedoms; items varied from airport security measures to banning travel completely.

Hierarchical regressions will be used to analyze data. Personality variables are expected to predict both perceptions of risk and willingness to sacrifice freedoms. Personality should predict willingness to a lesser degree when perceptions of risk are controlled, indicating a mediational relationship. Specifically, we expect that people who are low in optimism, high in powerlessness, and high in interpersonal trust will report that terrorist attacks are more likely and that this perception will relate to an increased willingness to sacrifice freedoms. Results from this study may help to explain the lack of a public outcry from controversial government policies instigated after 9/11 that endangered rights in the ultimate goal of protecting America from another terrorist attack. It also implies that terrorism may be effective in unintentionally increasing Americans' willingness to give up the very thing we stand for—freedom.

8. Birthrate and Population Density as Predictors of Quality of Life
Jessica Young
University of Northern Iowa
Faculty Advisor: Michael Gasser, Ph.D.
Abstract
It is thought that economies can benefit from developing their members by providing more opportunities. Thus, when populations grow quickly or are large, quality of life should decrease due to fewer opportunities. To test this hypothesis, two studies were used to investigate correlations between population and quality of life variables. The first study considered U.S. states, while the second study examined countries. Population measures included birthrate and population density, as well as population growth rate for countries. State quality of life measures were: graduation rates, GDP, unemployment, poverty, violent crime rate, and income. Country measures were: life expectancy, literacy, GDP per capita, unemployment, and poverty. Findings from state data did not support the hypothesis; however, country correlations were as predicted.

9. Social Support implications regarding Non-Suicidal Self Injurers, Men and Women
Heather Walker, Yolanda Evans, Kari Shaw
University of Northern Iowa
Faculty Advisor: Seth Brown, Ph.D.
Abstract
Social support can be extremely critical for individuals who engage in non suicidal self injury (NSSI) given the potential outcomes (e.g., scars). This study was conducted to determine level of social support, the constituency of the social support network and satisfaction of that support for those who have a history of engaging in NSSI compared to those who do not. In this study, 238 undergraduate students were administered self report measures of NSSI and social support. The results illustrate that those with a history of engaging in NSSI have an average of one less person in their support network and are less satisfied with those supports. The results also indicate that the proportion of social support from friends is higher for women, than for men. Therefore, social support should be regarded when working with those engaging in NSSI behavior and it should be noted that men and women seek out different types of people for help.

10. Effects of Religiosity & Religious Denomination on Risk Perceptions & Views of Terrorist Motivations
Melissa Duke, Brian Schmidtke, Taylor Wadian, Courtney Stufflebeam, Traci Priebe
University Of Northern Iowa
Faculty Advisor: Helen Harton

Abstract
Terror management theory suggests that people cope with the fear of death by investing in literal or symbolic immorality, such as through religion (Greenberg, Solomon, & Pyszczynski, 1997). Accordingly, several studies have shown more religious people are less afraid of death (Feifel & Nagy, 1981; Kahoe & Dunn, 1975). A study done by Swenson (1961), shows that people who have greater religious activity and more fundamental religious beliefs have a decreased fear of death and look forward to death more than those with little religious activity. According to a study done by Landau et al. (2004), religion may serve as a buffer for fears about other negative events, such as terrorist threats.

The goal of this research was to determine whether aspects of religion have an affect on people's views of terrorism. We predicted that people who report that they are more religious will believe that negative terrorism-related events are less likely, and that positive terrorism-related events are more likely to happen than less religious people. We also predicted that those students will hold more negative/dispositional views of terrorist motivations (e.g., trying to take over the world, insane) and that members of more liberal Christian denominations will endorse more situational motives for terrorists (e.g., economically oppressed).

197 college students completed (in a counterbalanced order) measures of religiosity, religious affiliation, and terrorism-related threats and motives. Participants rated how likely negative and positive terrorism-related events are to happen in the next two and ten years, and the extent to which 21 items are motives for terrorists.

An ANOVA was used to look at religious denomination and positive and negative terrorism and non terrorism threats. People in conservative denomination groups rated positive non terrorism related threats in two years and ten years as more likely. There were no other significant results at the .05 level. Religiosity was not related to terrorist motives.
These results have shown that people were less likely to agree that terrorists are motivated to commit terrorism acts because of personal qualities such as being poorly educated or feeling excluded because of their personal beliefs. It is clear from these results that students have stronger beliefs that terrorist activity is impacted more by our government and our political policies.

11. Pretty in Pink? Myths and Realities of High School Prom
Sarah Brandt
University of Northern Iowa
Faculty Advisor: Marybeth Stalp, Ph.D.

Abstract
This research compares social and cultural myths about the prom with the reality of the high school prom experience. Data include content analysis of prom-related popular media, and ten qualitative interviews with individuals aged 20-25 about their high school prom experiences. Perceptions of what prom is supposed to be like are heavily influenced by the media; study participants' real prom experiences were quite different. Additionally, participants' prom experiences related less with popular media depictions and more with their actual social status in high school culture. Findings support that the media present a narrow, idealized depiction of the prom that rarely reflects the actual prom experiences of American teenagers.

12. Am I as dark as I look?
Priyanka Joshi, Dight Pertersen
University of Northern Iowa
Faculty Advisor: Otto MacLin, Ph.D.

Abstract
Our tendency to categorize our social world into ingroup and outgroup members results in our search for cues that help us make the categorization. We use skin tone, and racial markers such as hair, nose shape, facial structure to identify people of different races. According to MacLin and MacLin's cognitive gating mechanism theory, once faces are identified as other race, we process them differently as compared to same race faces. Our perceptual processes intact exaggerate the differences between same and other race faces and African American faces are seen as darker than they actually are, whereas Caucasian faces are perceived as lighter than their actual shade. This hypothesis was tested using a color matching paradigm in which participants adjusted color patches to match to parents face. Exposure to an African-American facial image prior to adjusting color patches of various skin tones shifted perceptions of African-American and Caucasian faces to appear lighter than they actually were. Results lend support for a cognitive gating mechanism for racial categorization.

13. Video Games; The Name of the Game is Gender
Brandyce Frink
Influential German social theorist Georg Simmel argued that the essence of society is found within the interactions that take place between the members of which it is comprised. This idea of interaction as the core of societal structure reflects the important implications of interaction as a crucial means of shaping and forming the experiences we use to construct our realities. Nowhere is this more apparent than in the relationship that adolescents have with the video games they play.

This interactive form of media has the ability to shape ideas of not only what gender is, and how it is defined but also how it is illustrated in real life situations as mirrored in game reality. There are important implications for the adolescents that play these games and receive gender cues they themselves use to help shape their own gender identities. To understand what these gender cues are, our research question becomes how are characters in contemporary video games depicted with respect to gender? A content analysis of 20 popular video games using two platforms (PlayStation2, Xbox) was conducted to code for 8 variables ranging from character attire to character role. The analysis focused on primary and secondary characters along with an added female character in each game. Of the limited research that has dealt with looking at gender roles within video games we find that there are direct links between the roles of the characters and the gender roles they are given; the gender roles are highly dependent on the position and the attire of the characters. The results of this research are expected to yield similar results; stereotypical gender roles are illustrated in terms of attire, and position among the characters to be reviewed. These themes: gender, role and position, and sexuality are expected to be crucial to the dynamics of how the characters dress, their role in the game itself, and the position they play with respect to other characters in the game. The data collected will be analyzed and presented in light of existing research in this area.

14. Conflict and Relationships: Gender and Commitment Differences
Kari Shaw, Zebbedia Gibb
University of Northern Iowa
Faculty Advisor: Helen Harton, Ph.D.

Relationship research has often focused on gender differences with regard to infidelity. Specifically, researchers have investigated how men and women view emotional and physical infidelity. Studies have shown that both men and women view the two forms of infidelity as distressing, although women typically report higher levels of distress in reaction to emotional infidelity and men typically report higher levels of distress in reaction to physical infidelity (Cann, Mangum, & Wells, 2001). These differences are most often attributed to remnants of evolutionary traits (Buss, Larsen, Westen, & Semmelroth, 1992). While much research has focused on broad gender differences, not much has concentrated on gender differences in specific relationship issues such as money, friends outside of the relationship, and social support received from romantic
partners. The focus of the current study is to investigate how upsetting participant perceive various issues often encountered in committed romantic relationships, and to assess differences that may exist between men and women and those currently in a relationship and single individuals. Students completed a 24-item questionnaire asking them to rate their anticipated reactions to issues that could arise in the course of a romantic relationship. Analyses will compare ratings between men and women as well as between dating and single participants. It is expected that differences will be observed between the sexes when comparisons are made on each of the six relationship issues assessed.

15. Gender, Traits, &Terror: Their Effects on Willingness to Forfeit Freedoms
Courtney Stufflebeam, Traci Priebe, Taylor Wadian, Melissa Duke, Brian Schmidtke
University of Northern Iowa
Faculty Advisor: Helen Harton

Abstract
In the last few years, terrorism threats have led to reductions of freedoms for American citizens (e.g., Patriot Act, airport restrictions). Little research, however, has examined how gender may affect people's acceptance of such regulations. Men and women have different self-schemas. One of the most basic differences is that men have independent self-schemas, whereas women have interdependent ones. Many of the differences between genders can be explained by observing those self-schemas (Cross & Madson, 1997). For example, girls are more likely to value characteristics relating to interpersonal harmony, whereas boys value characteristics relating to social dominance and competitiveness (Rosenburg, 1989). Women also report higher levels of neuroticism than men (Lynn & Martin, 1997). Neuroticism is defined as a broad domain of negative affect, including anxiety, shame, and other negative emotions (Costa, Terracciano, & McCrae, 2001). Because women's interdependency may lead them to be more protective of others and because they may be more anxious, we predict that, given terrorist threats, women will be more willing to sacrifice personal freedoms in exchange for increased safety. We also predict that people high in neuroticism, regardless of gender, will be more willing to sacrifice freedoms.

197 college students completed a questionnaire designed for this study in which they indicated how willing they would be to surrender a list of freedoms (e.g., "I would be willing to give up my freedom of speech") if doing so would make them safer from terrorists. They also completed several personality measures, including the neuroticism scale from the Big Five Personality Inventory (Costa & McCrae, 1992), and demographic items.

We will use t-tests to examine gender differences in neuroticism and in willingness to forfeit freedoms in exchange for safety. We will also correlate scores on the neuroticism measure with self-reported willingness to give up these freedoms.

These results may help explain why people have reacted differently to government regulations and restrictions since 9/11. Women's desire to protect others may make them more willing to sacrifice personal rights for the common good.
16. Children’s Frequency Estimates of Gender-Stereotypic and Counter-Stereotypic Stimuli
Taylor W. Wadian, Kara Kelly
University of Northern Iowa
Faculty Advisor: Joshua Susskind, Ph.D.

Abstract
The current study tested three hypotheses (availability heuristic, gender transformation, and response bias) that can account for children’s overestimation of stereotypic in relation to neutral and counter-stereotypic stimuli in frequency estimation tasks. Thirty six second graders and 22 fourth graders were shown a series of gender-related pictures: a man performing a masculine behavior, a man performing a gender neutral behavior, a man performing a feminine behavior, a woman performing a feminine behavior, a woman performing a gender neutral behavior, and a woman performing a masculine behavior. Two different pictures were presented from each category. Each picture was presented three times in a random order. After a distracter task, the children were asked how often they observed: the original pictures, a set of pictures with identical behaviors with the gender of the actor transformed, and two sets of 12 pictures of novel behaviors that were not presented in the acquisition set.

All three hypotheses (availability heuristic, gender transformation and response bias) predict that the frequency estimates for stereotypical stimuli would be higher than for neutral and counter-stereotypical stimuli for the original stimuli. If the perception of illusory correlations is due solely to the availability heuristic, then the only significant effect would be for those stimuli. If gender transformation also accounts for the overestimation of stereotypic behaviors, there should be greater frequency estimates for the gender transformed stimuli for pictures that were originally counter-stereotypic than for pictures that were originally neutral or stereotypic. No differences would be expected for novel stimuli as the participants would not have memory traces of these pictures. The response bias hypothesis predicts overestimations of stereotypical stimuli for all three types of stimuli.

Higher estimates were made for stereotypic stimuli than for neutral or counter-stereotypic stimuli for the original pictures. A similar pattern was observed for the gender transformed stimuli. For the novel pictures, the children underestimated the frequency of stereotypic behaviors. These data support the gender transformation hypothesis and are counter to the response bias hypothesis. The availability heuristic may also influence children’s frequency judgments.

17. Emotional Differences and Pain Perceptions relating to NSSI
Brian Schmidtke, Maureen O’Connor, Kelly Espenschade
University of Northern Iowa
Faculty Advisor: Seth Brown, Ph.D.

Abstract
Previous research done on pain perception and non-suicidal self injury (NSSI) has focused on Borderline Personality Disorder (BPD). Studies have shown that persons
with BPD and NSSI report significantly less pain during experiments than do control groups or clinically depressed participants. Also, the individuals report analgesic experiences and relief of negative affect after testing for pain perception. The purpose of this study is to examine perceptions of physical discomfort and emotional reactions to a cold induction task between those with and without a history of NSSI. In this study, over 75 college students completed measures of perceptions of physical discomfort and emotions prior to and during a cold induction task. We predict that scores on certain aspects of the emotional measure will significantly increase after the cold induction task in individuals that have a history of NSSI. We also predict that those with a history of NSSI will have significantly lower pain perception during the cold induction task than those with no history of NSSI.

18. Professional psychologists’ beliefs about the changing rate of autism
Amanda Osborn
University of Northern Iowa
Faculty Advisor: Cathy DeSoto, Ph.D.
Abstract
This study investigates professional psychologists’ beliefs on why the prevalence of autism has increased over recent years. Psychologists across the United States were contacted by phone and asked about their opinions on the prevalence of autism, including whether they believe the true rate of autism has actually increased or whether the increase is due to changes in how autism is diagnosed. It is important to learn psychologists’ thoughts on the changing rates of autism, as psychologists are often at the forefront of diagnosis and treatment of autism. Therefore psychologists should be able to determine whether they have actually seen an increase in children with autism, or if they are only diagnosing these children differently. The results of this study will assist in beginning to resolve the controversy that has occurred in trying to explain the increase in rates of autism.

19. Correlation of Testosterone Levels with Social Dominance
Ivan T asovski
University of Northern Iowa
Faculty Advisor: Catherine DeSoto, Ph.D.
Abstract
Higher levels of testosterone in men have long been associated with an increased need to socially dominate and impose one’s will and opinions upon others. As testosterone is present in women in significant amounts as well, we assessed if there existed a correlation between the amount of the hormone in 33 males and 21. Levels of testosterone were measured via assay. Their testosterone levels were then related to their scores on the social dominance orientation (SDO) scale. After assessment of the data, it was determined that there exists a correlation between testosterone levels and the degree of social dominance in both sexes.
20. How Family Structure and Maternal Employment Affect the Parenting
Diedre Cave
University of Northern Iowa
Faculty Advisor: Kristin Mack, Ph.D.
Abstract
Many studies look at the role that family structure has in relationship to the delinquency rates of children. Other studies look at how the number of hours worked by the parent(s) or the process of parenting affects those same delinquency rates. Few studies, however, have examined the relationships between both family structure and maternal employment on the parenting process itself. Therefore, my study proposes to look at the relationships between these variables. Using approximately 1,300 respondents from the 2004 round of the National Longitudinal Study of Youth (NLSY74), I will examine the relationship between family structure along with maternal employment status and the process of parenting. This data will be analyzed and presented in the context of existing research on the topic.

21. The Importance of Practicing Capoeira in Arica, Chile
Julia Wignall
University of Northern Iowa
Faculty Advisor: Cynthia Dunn, Ph.D.
Abstract
The focus of my research project was the importance of practicing capoeira, a Brazilian martial art, outside of Brazil, and specifically in Arica, Chile. The significance of this question arose from the observation that for many people who practice capoeira, not only is it a sport, but also many times is a way of life. Therefore, this research looked into how and why capoeira has a specific impact on people who were not directly related to the formation of capoeira or to Brazilian culture. The main methods of research were participant-observation, as well as visual and audio recordings. From these methods, I have found that capoeira has become a ritual and symbol of liberation for the people who practice it in Arica. Furthermore, people that practice capoeira typically want more than just a workout or a sport to play but they want to find their place in a community. Finally, capoeira highlights the sense of a community through the reality that the people who practice it in Arica not only practice capoeira together yet also participate in many activities together outside of capoeira.

Marissa Arnett, Hannah Cearlock, Cassandra Douglas, Amy Higgins, Shari Nefzger, Liz Huebsch
University of Northern Iowa
Faculty Advisor: Carolyn Hildebrandt, Ph.D.
Abstract
The purpose of this study is to investigate children’s social and cognitive development in the context of two math games—“Swipe” and “Tag.” Swipe is a card game designed to help children create simple equations using addition and subtraction. Tag is a board game designed to help children use addition and subtraction to move about in geometric space.

Research questions are: How does playing Swipe and Tag affect children’s mathematical abilities as measured by speed, accuracy, and strategies used to set up and solve mathematical problems? How does playing Swipe and Tag affect children’s interpersonal behavior, as measured by their ability to share materials, follow rules, cooperate, and negotiate?

Participants will be 30 first and second grade students from a public elementary school in Northern Iowa. Each child will participate in four game sessions, each lasting around 10-15 minutes. All sessions will be videotaped for later analysis.

Session 1: Two children will play Swipe for 10 rounds. Then they will play another 10 rounds with a research assistant as a partner. The research assistants will model higher level mathematical reasoning, cooperation, and negotiation skills.

Session 2: Four children will play Swipe again in teams of two. After 10 rounds, they will be assigned to a different partner. After 10 more rounds, they will switch partners again so that each child will have had the opportunity to play with three different partners. Sessions 3 and 4: The same procedures will be used for Tag. To control for possible order effects, half of the children will start with Sessions 1 & 2 and half will start with Sessions 3 & 4.

Data collection is currently underway. Videotaped data will be coded using a system designed for this study. It is hypothesized that (1) children’s mathematical abilities will improve, as measured by speed, accuracy, and higher-level strategies, and (2) children’s treatment of team members will differ from their treatment of opponents but an overall atmosphere of cooperation will prevail. Overall, we expect that these games will serve as an exciting method for mathematical learning while providing opportunities for peer interaction and social development.

23. Using Alternative Bingo to Teach Probability and Statistical Sampling
Tory Medinger
University of Northern Iowa
Faculty Advisor: Carolyn Hildebrandt, Ph.D.

Abstract
The purpose of this study is to evaluate the effectiveness of Alternative Bingo, a game designed to teach/review statistical sampling and probability. Previous research indicates that college students who play Alternative Bingo and then listen to a lecture-demonstration about statistical sampling and probability show significant gains from pre-test to post-test on knowledge of these concepts (Medinger, Choma, & Hildebrandt, 2007). However, it is unclear what proportion of these gains is due to playing the game, to listening to the lecture-demonstration, or to a combination of both. The aim of the present study is to evaluate students’ learning in a game-playing condition only.
Eighty undergraduate psychology students participated in the study. First, students filled out a demographic questionnaire and took a pre-test on statistical sampling and probability. Then they played Alternative Bingo four times, took a post-test, and filled out an evaluation of the session. To play Alternative Bingo, students fill out their own Bingo card with numbers than can be obtained by rolling two standard, six-sided dice and then summing the two numbers (e.g., 4 + 3 = 7). Whereas the standard game of Bingo is won primarily by chance, Alternative Bingo requires both chance and skill.

Data analysis is currently underway. It is hypothesized that students in the game and lecture-demonstration condition will score higher on the post-test than students in the game-only condition. We also expect that students in the game and lecture-demonstration condition will write more favorable evaluations of the session.

24. Gender Differences in Illegal Interview Questions
Charles Michels III
University of Northern Iowa
Faculty Advisor: Michael Gasser
Abstract
In job interviews there are certain topics, as established by the Equal Opportunity Employment Commission's Fair Inquiry Guidelines and Title VII of the Civil Rights Act of 1964, which are illegal to be approached by the interviewer. These topics include, but are not limited to: national ancestry, non-work activities, family, physical handicaps, arrests, and wage garnishments. While these areas are considered "off limits" with regard to employment selection, they are still being approached in job interviews. According to Jerry Weinger, chairman of Bernard Haldane Associates, more than one third of job applicants have been subjected to illegal interview questions. The purpose of this study is to determine whether it is men or women that are being asked these questions more often, and whether it is men or women that are more often asking these types of questions. Participants will be randomly selected college students that will be given an electronic questionnaire to fill out asking them sixteen potential questions that could be encountered in a job interview; eight of them legal, and eight of them illegal, in random order. They will also be asked if the interviewer was male or female. Several other questions about the job, including: whether the applicant was offered the job, whether the applicant accepted, starting pay, and number of times the participant encountered the question in the past. After data has been collected, it will be analyzed to determine if any significant correlations exist between gender and likelihood of interview questions being of an illegal nature. Research will begin pending IRB approval.

25. Utilizing PsychoPro to Examine the Cross-Race Effect using Various Methodologies
Dwight Peterson, Cody Hashman, Jessica Young, Ben Stone
Faculty Advisor: Otto MacLin, Ph.D.
Abstract
In our post 9/11 society issues regarding airport security and racial profiling have become extremely salient. Thus, it has become important to conduct research on a variety of issues related to race in an attempt to inform public policy through research. Additionally, the Criminal Justice System has implemented modifications to existing policy which has been informed, in some cases, by research conducted by psychologists. For example, cross-racial identifications made by witnesses to crimes, are problematic in that research conducted over the past 40 years has found extensive evidence for a Cross-Race Effect, a robust phenomenon in which people of one race exhibit greater recognition accuracy for members of their own race, compared to members of other races (Malpass & Kravitz, 1969). As such, a multitude of methodologies and research tools can and should be utilized to further examine topics explored by this area of research.

We propose the use of PsychoPro, a computer program operating within the Visual Basic 2005 programming framework, allowing the researcher to conduct various psychological experiments. Researchers using this program can determine the location in which their experimental stimuli are located on a computer and input this information into the program, which will present stimuli in a manner specific to the method being used. Furthermore, researchers can present instructions, specific to their study, to the participant using this program. PsychoPro also allows the researcher to determine the location within a computer where they would like the program to record participant responses.

Specifically, PsychoPro is equipped with five different programs, each of which employs the use of a different research method to conduct psychological experiments. These programs can be used to conduct various psychophysical studies to examine racial thresholds. Additionally, paired comparisons can be made for later analysis using multidimensional scaling to examine how similar or dissimilar particular stimuli are from one another and where these stimuli exist on a representational two dimensional plane. We have used PsychoPro, along with the various methodologies included within its component programs, toward examining the Cross-Race Effect and believe in its efficacy toward examining race and race related issues.

26. NBA technical fouls: cross-racial misinterpretation of aggression
Landon Small, Zack Meade, Taylor Wadian, Joshua E. Susskind, Special Topics Class on Race
University of Northern Iowa
Faculty Advisor: Otto Maclin, Ph.D.

Abstract
Research on racial discrimination seeks to expose and explain differential experiences that people have in a particular context as being a function of their race. The institution of sports provides an interesting context in which to study interactions between people of different races and with different levels of authority. Economists Joseph Price and Justin Wolfers (2007) issued a somewhat controversial report on apparent racial discrimination among NBA referees using game statistics, with special focus on foul calls. The present study used similar archival data to examine trends in the issuance of technical fouls to
players following a verbal dispute of a referee’s official decision. The direct interaction between referee and player in this situation, as well as the requisite subjective judgment, provides an opportunity for the referee to interpret and analyze the behaviors of the responding player. Based on theories of cross-racial misinterpretation of aggressive behavior, it is expected that a player’s likelihood of receiving a technical foul is a function of his race, with African-American players receiving a disproportionate majority of technical fouls. It is further expected that a player’s likelihood of receiving a technical foul is also a function of the race of the referee who issues the technical foul, with referees being more likely to issue technical fouls to other-race players than to same-race players. The expected results would provide support for the idea that individuals are less skilled at interpreting aggressive behaviors of other-race individuals than same-race individuals.

27. Special Housing for Freshman Students: Beneficial or Not?
Elise M. Cochrane
University of Northern Iowa
Faculty Advisor: Helen Harton

Abstract
Recently, universities and colleges across the country have begun implementing first year experience programs to help freshmen college students adjust better to their school. Studies have shown that students living in first year experience housing report higher levels of social adjustment than students living in regular housing (Enochs & Roland, 2006). They also report feeling more comfortable in the residence halls and more satisfied with their living experience than other students (Li, McCoy, Shelley, & Whalen, 2005). This study expands on previous research by examining and comparing these and other aspects of student adjustment in students who participated in Springboard (SB) housing (a first year experience) versus regular residence hall housing.

174 sophomore students participated in an online survey via their personal university student page. The survey assessed GPA, happiness (Diener et al., 1985), worrying (Osman et al., 2001), adjustment to college, perceptions of the Resident Assistant, house identity and university identity (Hogg & Haines, 1996), alcohol use, involvement at the university, and plans to graduate from the university. Participants' GPA and demographics were automatically collected from university records when students participated in the study.

It was expected that students who lived in SB housing would report better adjustment to college than those who did not live in SB. These students were expected to have higher GPA’s, more happiness and involvement, less worrying and alcohol use, better adjustment to college, a stronger school and house identity.

It was found that students living in SB had higher GPAs and had a stronger identity with their house than students living in regular housing. However, there were no differences in alcohol use, university identity, happiness, perceptions of the RA, worrying, adjustment to the university, whether they planned to graduate from the university, or involvement at the university. These results are important because they will help determine whether the Department of Residence should continue to offer SB housing and/or require it for all
incoming freshmen. The results would also be informative for schools planning to begin or continue similar programs.

28. Functions of the Amygdala in Face Processing and Racial Categorization
Osman Chowdhry, Dwight Peterson
University of Northern Iowa
Faculty Advisor: Otto MacLin, Ph.D.
Abstract
Research has demonstrated the role of the amygdala in differential processing of other-race faces (Hart et al., 2000). Furthermore, the amygdala is implicated in evaluating social stimuli and emotional signals, suggesting an emotional component to face processing (Phelps & Anderson, 1997). These findings support the theory of MacLin and MacLin (2007) of a cognitive gating mechanism (CGM) for other-race faces, which selects for racial markers (e.g., skin tone, hair) early in the face recognition process (MacLin & Malpass, 2001). Faces containing racial markers are directed via the CGM for differential processing, rather than processing for recognition, as in same-race faces. Because the amygdala processes threatening stimuli we hypothesized that adaptation to threatening images would reduce the role of the amygdala in processing other-race faces. Furthermore, perception of other-race faces would be altered, allowing facial stimuli, ambiguous to race, to be accepted as same-race. Stimuli included “parent” faces of an African American male and Caucasian male morphed into a continuum of 50 images.

During the pre-adapt phase participants (n=40) adapted to a grey image followed by an adapt phase in which participants adapted to threatening or non-threatening canine images. Utilizing the method of constant stimuli to present the images created from the morphed continuum, participants in both conditions, following adaptation were asked to respond to the question, “Is this person white?” Values were computed based on differences between threshold values for the pre-adapt and adapt phase. For the group viewing threatening canine images (N=22), the shift was in the predicted direction (M=-.136, SD=.594). The group viewing non-threatening canine images (N=18) shifted in the positive direction (M=1.61, SD=2.55). The difference between conditions was significant, t(38)=2.08, p <.05, SE=.85) indicating subjects adapting to a non-threatening image categorized fewer faces as Caucasian; observers adapting to threatening images categorized more faces as Caucasian due to a reduction in the role of the amygdala.

These results support our hypothesis that the amygdala is involved in face recognition and racial categorization. Additionally, when adapting to non-threatening images, fewer faces are categorized as Caucasian, supporting MacLin and MacLin’s theory that a CGM redirects other-race faces for differential processing.

29. Language Exclusionary Behavior and Attitudes Toward Immigrants
Christine Bennett, Amanda Harms
University of Northern Iowa
Faculty Advisor: Helen Harton
Abstract
Integrated threat theory (ITT) suggests that there are four threats that lead to prejudice toward outgroups such as immigrants: realistic threat, symbolic threat, intergroup anxiety, and negative stereotypes (Stephan, Ybarra, & Bachman, 1999). Immigrants often speak languages that natives do not understand, leading to intentional or inadvertent ostracism, which in turn may increase perceptions of these threats. For example, English-language participants excluded from a conversation in Spanish report more negative reactions than participants excluded in English (Hilfan, Kelly, & Zárate, 2006). The current study expanded upon prior research by ostracizing participants in English, Spanish, or Arabic. In addition, we examined whether social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994), which relates to unfavorable attitudes toward immigrants (Esses, Jackson, & Armstrong, 1998), moderated the effects of ostracism on attitudes. People high in SDO want their social group to dominate and subordinate groups they consider inferior, so they may be particularly bothered by language-based ostracism. We predicted that participants would report greater prejudice toward immigrants when they were excluded in Arabic than in Spanish because of more anxiety toward and unfamiliarity with Arab immigrants, and that these effects would be stronger for participants higher in SDO. 80 undergraduates discussed social topics via a computer-based chat program with a confederate posing as two other participants. After eight minutes of inclusion, participants were ostracized in English, Spanish, or Arabic for the remainder of the discussion, with an English-language inclusion condition as a control group. Then students completed ITT scales for immigrants (Stephan et al., 1999), an SDO measure (Pratto et al., 1994), and a social desirability scale (Crowne & Marlowe, 1960). Although participants did feel more excluded in the exclusion conditions, they did not report greater prejudice after being excluded.

30. Using Multidimensional Scaling to Examine the Cross-Race Effect
Benjamin Stone, Dwight J. Peterson, Jessica Young, Cody Hashman
University of Northern Iowa
Faculty Advisor: Otto MacLin, Ph.D.

Abstract
Ronald Cotton, an African-American man was wrongly convicted of two counts of rape against two Caucasian women. The primary evidence used to in his trial was eyewitness identification. He was sentenced to serve life in prison; later DNA evidence exonerated Ronald Cotton after he had already served 10.5 years of his sentence. This is an example of how the cross-race effect can have far reaching consequences in our legal system. The cross-race effect is when recognition of other race faces is more difficult than recognition same race faces which. This then leads a person to believe he or she has seen the other race person before. A recent study by Chowdry et al. (2008) identified specific boundaries that separated what face was perceived as same race and other race. We wish to further examine this phenomenon by looking at different dimensions of recognition using multidimensional scaling (MDS). MDS is a statistical procedure that takes comparison data, in this case pairs of faces, rates them using a 7 point Likert scale and identifies where they would be located in a two dimensional space.
By morphing two faces, one Caucasian and one African American, a perceptual continuum was created with 11 total faces at 10% intervals, for a total of 55 pairs of faces to be rated in this study. By using MDS, we can examine up to six different dimensions of face recognition, plot the data on graphs, and allows for the chance of identifying what additional dimensions are used in cross-racial recognition. In addition, the use of MDS allows us to see how the different faces group in multidimensional space. Based on pilot data from six participants, though this number seems low psychophysical methods do not require a high N, we have identified some interesting trends. Further study is required to collect additional data and interpret those findings. As you can see, the cross-race effect has far reaching implications in the legal system and many other facets of our world.

31. Work Drinking Norms and College Student Alcohol Consumption
Brandon Schipper
University of Northern Iowa
Faculty Advisor: Adam Bulter, Ph.D.

Abstract
Research has found that drinking among college students has been on the climb. College students’ alcohol consumption is also much higher than their age-matched non-student peers. With the growing problem concerning drinking and college students, research on the causes of college student drinking would go a long ways into finding ways to fix this problem. We investigated how social norms at work regarding alcohol consumption are related to student drinking habits. A random sample of 385 University of Northern Iowa students who worked and drank alcohol took part in an internet based survey. Coworkers drinking before or at work is significantly correlated with days per week alcohol is consumed during the school year, times having at least one alcoholic drink in the last month, and times during the past month drinking 4 (for women) or 5 (for men) or more drinks on an occasion. Having coworkers that drink and discuss drinking alcohol while at work is significantly correlated with days per week alcohol is consumed during the school year, times having at least one alcoholic drink in the last month, times during the past month drinking 4 (for women) or 5 (for men) or more drinks on an occasion, and average number of drinks consumed when drinking. These results suggest that college students drink more when their social environment at work promotes or encourages alcohol consumption.

32. Children’s Online Categorization of Ethnicity and Gender
Angela H. Halfpap
University of Northern Iowa
Faculty Advisor: Joshua Susskind

Abstract
Prior research demonstrates that people encode information about others on the basis of social categories such as gender and ethnicity. The present study utilized the matching statements paradigm to examine how these categorization processes function in children and pre-adolescents. This method involves having participants observe a conversation
between people of several social categories. After watching, the participants are asked to match statements from the conversation with the people who made them. More within-category mistakes (e.g., mistaking one man for another) than between-category mistakes (e.g., mistaking a man for a woman) indicate that the participant attended to that category. Past research (e.g., Taylor, Fiske, Etcoff, & Ruderman, 1978) has found that adults follow this pattern of categorization. Stangor, Lynch, Duan, and Glass (1992) observed that adults combine social features to categorize individuals at a subgroup level (e.g., Black female). Subsequent studies (e.g., Bennett & Sani, 2003) have found that children as young as 5-years-old make more within-category errors for gender and for ethnicity. Susskind (2007) found that 10- to-13-year-olds categorized social targets that vary on two dimensions (i.e., gender and ethnicity) at the subgroup level. The current study examined how 5-to-6, 7-to-8, and 10-to-12-year-olds categorize these targets and (b) whether priming gender or ethnicity affects these categorizations. Seventy-five children were told they would observe a conversation between either adults; men and women; or White and Black adults. They then watched a PowerPoint presentation of a conversation involving two Black men, two Black women, two White men, and two White women. Each slide displayed the speaker’s picture and a recording of the speaker’s statement. Afterwards, the children were asked to determine who made each statement. The pattern of errors in their assignments was examined to assess how they categorized the adults. At each age level, more within-ethnicity-within-gender

### 33. Student Alcohol Consumption: How it Influences School Effort and Satisfaction

Hannah Cearlock, Amanda Bakeris  
University of Northern Iowa  
Faculty Advisor: Adam Butler  

**Abstract**

We examined the relationship of school attitudes and motivation with college student alcohol consumption. The participants were randomly selected students from a state university who were employed and drank alcohol (n=385). Putting forth greater effort at school was negatively correlated with the number of days per week a college student drinks alcohol, as well as the number of times they engage in binge drinking (five drinks or more). School satisfaction was unrelated to student reports of drinking. These findings indicate that students who are more motivated are likely to consume less alcohol. This may suggest that interventions geared toward increasing student motivation or the effort required to perform at school may decrease alcohol consumption on college campuses.

### 34. MUSLE-based Soil Erosion Modeling Using ArcGIS

Adam Lee, Yanli Zhang  
University of Northern Iowa  
Faculty Advisor: Ramanathan Sugumaran, Ph.D.  

**Abstract**

Soil erosion is one of the main environmental concerns in Iowa. Soil erosion and sediment loss cause substantial water quality degradation and economic impact. It is
critical to manage soil erosion to protect water quality and maintain land productivity. In order to assess the soil erosion risk, a Geographic Information System (GIS) based Modified Universal Soil Loss Equation (MUSLE) model was developed within ArcGIS© to estimate soil loss and identify areas with high erosion risk. With easily available spatial data (soil, land cover, DEM, and rainfall) and user friendly interfaces, it can calculate the sediment delivered to the streams in a watershed from a given rainfall event. Water quality and quantity data were collected for eleven small watersheds in eastern Iowa to evaluate the model.

35. Evaluating the validity of an online Intelligence Assessment as compared to the Wechsler Abbreviated Scale of Intelligence
Meghan Smith, Elizabeth Bolinger, Jamie Ryan, Lesley Hiebing, Mo Conner
University of Northern Iowa
Faculty Advisor: John Williams, Ph.D.

Abstract
Online intelligence tests are widely available to the public and claim accuracy in measuring intelligence without providing statistical support for such claims. This study examined the validity of a popular online intelligence test available at www.tickle.com called the Super IQ test. Specifically, the primary purpose of this research is to compare whether a popular internet IQ tests is consistent with standardized, established IQ tests. Administered IQ tests are often expensive and time consuming, and it would be beneficial to determine if accurate results could be obtained using a less-expensive and time-saving method- the internet.

Participants were undergraduate students enrolled in a course requiring research participation. Following the informed consent procedure, half of the students completed the Super IQ test, followed by the Wechsler Abbreviated Scale of Intelligence (WASI), and half were first given the WASI, and then completed the online version. These conditions were randomly assigned. Tests were administered by graduate students trained to administer intellectual assessments.

The WASI is an abbreviated version of the Wechsler Adult Intelligence Scale (WAIS). The WASI can be administered to individuals ages 8-89. It yields two subtest scores (performance and verbal), as well a Full Scale IQ score. The WASI has demonstrated excellent reliability, internal consistency, concurrent validity and high correlations with other accepted measures of intelligence (Sattler, 2001).

The reliability and validity for online IQ tests are largely unknown, and most online tests lack any sort of standardization process. According to http://web.tickle.com/about, tickle is a leading provider of online testing services. Tickle's Think Tank of certified PhDs ensures that the sites' services are useful and the content is relevant. The site claims that its tests were developed in collaboration with psychology and marketing experts from such prestigious institutions as Duke, Yale and Harvard. According to the website, tests are developed by PhDs and are based on current psychological research. They spend significant amounts of time developing and validating each test on their website, sometimes as long as 10 months.
Our preliminary results indicate that the Super IQ test does not correspond well with the WASI. Further analyses are ongoing.

36. Student employment and drinking
Charles Michels
University of Northern Iowa
Faculty Advisor: Adam Butler

Abstract
This study examined the relation between hours worked, both on and off campus, and drinking habits. Participants were randomly selected public university students that fulfilled the study requirements of drinking and employment (n=385). The study used an initial questionnaire and daily questionnaires to determine hours per week worked on campus, hours per week off campus, total hours per week worked, days per week drinking, drinks per day, days drinking per month, average number of drinks consumed, and number of days binge drinking. Hours per week worked on campus and total hours worked were positively correlated with days per week drinking, while hours per week worked on campus were also positively correlated with days drinking per month. The results of this study illustrate that students employed at off campus jobs drink more often than students employed on campus, and offering more work study hours and/or more on-campus employment opportunities may assist in reducing frequency of alcohol consumption by university students.

37. Emotional Dependency, Stress, and Social Support
Bethanie Frattini-Scott
University of Northern Iowa
Faculty Advisor: Elaine Eshbaugh

Abstract
Social support is commonly sought out as a means of coping with life changes and stressors. There is limited research demonstrating the effects of emotional dependency on the relationship between stress and perceived social support. This study analyzes the effects of emotional dependency and network orientation (one's unwillingness to seek support from others) on perceived social support during periods of distress in college students.

It was hypothesized that network orientation is negatively correlated with perceived social support, distributed across family, friends, and an intimate partner, when applicable. Emotional dependency was expected to moderate the relationship between stress and perceived social support. These correlations between perceived social support and stress were expected to be greater in relation to an intimate partner than with family and friends. Low levels of emotional dependency were expected to result in high levels of perceived support from family, friends, and an intimate partner, independent of perceived stress.

311 college students ages eighteen and older were recruited for this study. Participants completed questionnaire packets which were distributed during designated
class times. Four measurement scales were used within the questionnaires: the Network Orientation Scale, a subscale of the Interpersonal Dependency Inventory, the Multidimensional Scale of Perceived Social Support, and the ten-item Perceived Stress Scale.

Results from this study indicate that network orientation is negatively correlated with perceived social support, but no significant difference exists between types of social support. Emotional dependency was found to have little effect on the relationship between stress and social support, which are negatively correlated. No significant relationship was found between emotional dependency and perceived social support.

These results are expected to contribute to the knowledge of the factors that influence perceived social support as a coping mechanism during periods of distress. This information is useful for understanding how stress and social support affect people's willingness to seek help from mental health professionals, and for understanding the effects of seeking support from family, friends, and intimate partners during times of distress.