

1999 Abstracts

- **The Effects of Gender-Specific Toys on Language Sampling with African-American Children**

Jennifer Walz/ (Dr. Janet Gooch and Dr. John Ishiyama)

The purpose of the current research was to examine the language produced by male and female African-American children during play with two gender-specific toys. Fifteen minute spontaneous speech samples were collected from six African-American males and six African-American females, ages four to six years, while playing with a doll house (female gender-specific toy) and a western town (male gender-specific toy). The samples were orthographically transcribed and analyzed for the following: number of utterances, questions, fantasy topics, here-and-now references, and conventional sounds. A two-by-two ANOVA was used to determine main effects of gender and toy on the dependent variables.

- **Lurking at the Roadside: Assessing the Invasive Phenomenology of *Matricaria perforata* in a Sub-Alpine Environment**

Christine Soriea Sheikh/ (Dr. Michael Ira Kelrick)

The exotic *Matricaria perforata* Merat (scentless chamomile) will be compared to native sub-alpine species in various conspecific/allospecific contexts that each examine a vital aspect of invasive ecology. Possible studies are: reciprocal transplanting (2 types) and varying nutrient regimes. Transplantation of focal individuals to monospecific stands highlights competitive interactions. Differentiated growth on gopher throws illustrates whether *M. perforata* depends upon human disturbance for proliferation. Native/non-native growth on a nutrient gradient may differentiate into competitively-significant species patterns. Relative growth rates (RGR) analyzed for species under various treatment conditions illustrates the potentiality of an *M. perforata* spread into unadulterated Rocky Mountain sub-alpine meadows.

- **The Effect of an Endophytic Fungus on a Tri-trophic Interaction**

Leah Dudley/ (Dr. Thomas Bultman)

The study system consists of a tri-trophic interaction between tall fescue (*Festuca arundinacea*), an herbivorous insect (*Rhopalosiphum padi*), and its parasitoid wasp (*Aphelinus asychis*) and an endophytic fungus (*Neotyphodium coenophialum*) that behaves mutualistically with tall fescue. The endophyte produces alkaloids, protecting tall fescue from herbivory; however, alkaloids may negatively affect the wasp as it develops within the *R. padi*. The potential effect of the endophyte upon the wasp is analyzed. This research is of particular interest in that it will enhance efforts to manage the fungus and provide a more complete understanding of the role endophytic fungi play in plant-insect interactions.

- **Effects of Familiarity with a Play on Audience Perception of Gender Roles**

Joseph Fuemmeler/ (Dr. Mark Hatala)

An audience member's response to a show involves both what they are shown on stage by the performers and their own experience with the play and theatre in general. When a director changes gender representation as well, one might expect to an effect for the subject's sex as well. Participants in this study have watched a production of Shakespeare's *As You Like It* in which several gender "twists" are present. The participants' evaluations of six actors, some in gender-switched roles, some not, will be analyzed to examine the effect of prior knowledge of the play on evaluation of actors.

- **The Use and Perceptions of African-American Vernacular English**

Teneshia Milligan/ (Dr. Janet Gooch)

This study will investigate the reported use and perceptions of African-American Vernacular English (AAVE) by African-American college student's. The data will also include completed questionnaires by African-American students, white students and other members of academia that will demonstrate the perceptions regarding African-American students' use of AAVE. The discovery of this information will lead to increase knowledge of AAVE so that it will no longer be looked upon as communication disorder.

- **Vimentin Production in the Lens of Aging Rats**

Janette Dumas/ (Dr. Charles Fleschner)

Lens cells in the eye contain the protein vimentin. This study will investigate the distribution of vimentin among particular membrane fractions taken from different aged rats. Studies have shown that vimentin is present in the cytoskeleton of young lens cells, but it is not usually present in older lens cells, (Bradley, et al., 1979; Colucci-Guyon et al., 1994). Biochemical procedures such as sodium dodecylsulfate polyacrylamide gel electrophoresis, SDS PAGE, will be used to analyze vimentin during the aging process of the lens. It is hypothesized that the decrease in vimentin is localized to a certain region in the lens.

- **Writing Class and Gender: "Difference" chez Annie Ernaux**

Jennie McKellips/ (Dr. Gloria Kwok)

Although Annie Ernaux's works primarily describe "difference" as defined by class, many aspects of her writing have been shaped by her gender. In this research, I will concentrate on elements of her style such as syntax, rhetorical devices, rhythm and perspective as they relate to theories of *écriture féminine* to explore connections between writing, class and gender in each of her novels. This study will break new ground by examining writing style instead of themes in an attempt to understand the ways in which women from the working-class experience their bodies and their oppression differently from middle-class women.

- **A Study of the Variation of Modal Frequencies amongst Clarinet Reeds**

Paul Downing/ (Dr. Ian Lindevald)

A newly developed method will be used to measure the modal frequencies of a large sample (~50) of clarinet reeds. This method produces a spectrum of a vibrating reed by sensing the variations in a beam of laser light reflected from the reed. The measured modal frequencies will be used to characterize typical clarinet reeds, and to reveal how commercially available reeds vary relative to the typical reed. Understanding the reeds' physical characteristics may provide insights into their sound quality variations as perceived by musicians, and could ultimately lead to suggestions for modification in the reed manufacturing process.

- **Comparing Student and Faculty Perceptions of the Severity of Cheating**

Keri Wingo/ (Dr. Mark Hatala and Dr. John Ishiyama)

This study analyzes the differences in perception of the severity of cheating comparing faculty and students at Truman State University. To this end, faculty and student respondents were administered a questionnaire which asked several questions concerning attitudes regarding academic cheating and whether these attitudes were a function of situational variables. The first independent variable is test type (quiz vs. examination). The second independent variable is level of preparedness of the cheater (prepared vs. not prepared). The dependent variable is a students' rating of the severity of the cheating in analyzing one of the four scenarios. The rating is expressed as a six point Likert-type scale: 1-not severe and 6-very severe. First, it was hypothesized that cheating would be more severely (rated higher) when the scenario involves the cheater as having not prepared for a 100-point examination. In addition, it was postulated that those who received the scenario where academic pressure is low, such as a 5-point weekly quiz and the cheater as prepared, will rank the level of cheating as least severe.

- **The Color of Advertisements and Need for Cognition**

Jennifer McDavid/ (Dr. John Ishiyama)

Over the past 25 years, numerous studies have been conducted to measure the effectiveness of coloring of advertisements. The results have been inconsistent as well as inconclusive. There has been an ongoing debate among students of advertising whether color has a positive, negative, or indeed any influence of the effectiveness of the advertisement. The focus of this study is to determine the effectiveness of color of advertising media as it interacts with an individual's need for cognition. Need for cognition can be defined as an individual's intrinsic enjoyment of, and motivation to engage in effortful cognitive information processing (Cacioppo and Petty 1981). Questionnaires containing two selected advertisements, one colored and one black and white and were given to approximately 50 undergraduate and graduate students of varying age. The questionnaire was designed to determine the subjects attitude toward the advertisement, attitude toward the brand, and overall effectiveness of the humorous advertisement. An 18-item Need for Cognition Scale (Cacioppo, Petty and Kao 1984) was administered following the survey. The research will provide evidence that indicates than an individual with a low need for cognition will be favorable toward colored advertisements that contain text, while an individual with a high need for cognition will be favorable to black and white advertisements.