

## 15<sup>th</sup> Annual McNair Research Presentation Abstracts

#### **How Fair is Fair Value Accounting?**

#### Cyprian Alaribe Dr. W. Bruce Johnson, Research Supervisor, University of Iowa

Quantitative financial reporting of asset values and liabilities using a single financial instrument has been debated and brought to the Financial Accounting Standards Board's (FASB) attention for a number of decades. FASB's mission is to improve and establish new standards of financial accounting and reporting. The debate of fair value versus historical cost accounting is intrinsic to the evolution of financial reporting. Historical cost accounting requires that the numbers reported on accounting financial statements be recorded at the amount actually paid for an asset. Opponents question the relevance of this measurement convention. Fair value accounting, on the other hand, reports the current market values of assets and liabilities. Opponents of fair value question the reliability of the measurements.

The purpose of this research is to present the opposing views on this important accounting policy debate, due to the trend of America's economy and its increasing demand on fair value measurements in financial reporting. The debate involves conflicting views pertaining to the more accurate measurement of financial assets and liabilities. The research encompasses an array of literature regarding the debate of fair value measurement and it will be left for readers to decide which measurement convention better suits America's companies.

# Medicaid and the Working Poor: Influences on Non-Utilization of Medicaid Services

# Laura S. Casey Dr. Candy Young, Research Supervisor

This study examines over twenty political, social, and economic factors that influence an individual's consumption of services made available by Missouri's Medicaid program. This is crucial in understanding what prevents those eligible from accessing the medical services fundamental to a higher quality of life. The research identifies that on a county-by-county level of analysis, median household income, unemployment rate, number of health clinics relative to the county's Medicaid eligible population, geographic region, and percent of the population that speaks English as a second language, as the five statistically significant predictors of a county's utilization rate.

#### Microfinance and Child Mortality: Sub-Saharan Africa

#### Vanity K. Gee Dr. Victor Lima, Research Supervisor, University of Chicago

When the United Nations declared 2005 as the International Year of Microcredit, many countries affirmed that microfinance is a good solution to improving the socioeconomic conditions of the extreme poor. Microfinance institutions (MFIs) provide modest, collateral-free loans to customers who are considered unprofitable by commercial banks, in return for a small deposit. Many also provide savings opportunities, insurance, and money transfers. Over the years, microfinance institutions have made positive impacts on developing regions around the world, including Southern Asia, India, and Sub-Saharan Africa. Despite various case studies of communities in Africa, no research has assessed the efficacy of MFIs on the Sub-Saharan region as a whole. This research attempts to show that the presence of MFIs has a positive impact on child mortality rates in Sub-Saharan Africa. It finds that although the presence of microfinance positively affects child mortality rates, the effect is statistically insignificant. However, it is important to note that data constraints limit the broad application of this conclusion and show that establishing a uniform method of collecting and analyzing MFI performance data improves the accuracy of assessing the impact.

#### Black Women's Perception of Workplace Conflict as a Function of Skin Tone

# Brandy Holmes Dr. Jeffrey Vittengl, Research Supervisor

This study tested the hypotheses that Black women with dissimilar vs. similar skin tones will experience more interpersonal conflict in the workplace, and that Black women who experience greater workplace conflict with other Black women of dissimilar skin tones will have lower satisfaction with life. Participants were 35 Black women in the workforce. Participants completed online questionnaires measuring workplace conflict, skin tone, and satisfaction with life. In partial support of the hypotheses, darker skinned participants reported more emotional neglect from lighter than from darker skinned Black coworkers. Patterns of verbal abuse and work obstruction did not support hypotheses, and workplace conflict did not correlate significantly with satisfaction with life. Theoretical and practical implications of the current results are discussed.

# Inside the Artwork: A Black Child's Perception of Skin Tone in Relation to Social Status and Self-Image

# Danielle M. Leveston Dr. Christine M. Thompson, Research Supervisor, Penn State University

This study discovered whether black children, ages 8 and 9, show stereotyped perceptions of people holding high status occupations, and more so, if they believe that lighter-skinned individuals are more likely to hold these occupations. We also explored the relationship between how the child perceives himself in comparison to the way he perceives a person holding a high

status occupation. Children were asked to draw and color pictures of themselves, as well as depictions of people in occupations that are considered high status. The researcher used indicators in the child's artwork, such as skin color choices, as well as the child's discussion, to evaluate the potential skin color bias. The hypothesis that children will show a preference for the lighter spectrum of skin color when drawing the occupational pictures was partially supported by the drawings, but fully supported by the children's discussions.

## The Domestication of Horror: Jane Austen's Revision of the Gothic in Northanger Abbey

#### Jennifer D. Miller Dr. Linda Seidel, Research Supervisor

This paper uses genre theory and deconstruction to argue that rather than parodying the Gothic romance, Jane Austen's novel, *Northanger Abbey*, revises the genre—toning down its sensational elements—in order lay bare the dangers and everyday horrors (possibly) endured by the female members of a system founded upon boundless patriarchal authority. Further, it contends that this revision causes the reader to reconsider the Gothic genre in its own right, taking its essential message about the perils of unchecked male power more seriously than before.

### Genuine Artifice, Serious Camp: The Women's Films of Todd Haynes

#### Jason Qualls Dr. Linda Seidel, Research Supervisor

In "Notes on Camp," Susan Sontag argued that intentionally artificial and extravagant elements in aesthetic performance are a means by which gender-deviant individuals may "playfully" ease their integration into society. Todd Haynes, a gay filmmaker, uses these stylized elements in his films *Safe* and *Far From Heaven* not as means of integration for gay men, but to highlight the struggles of disenfranchised women. This research examines how Haynes shows that his campy, queer artifice, however satiric, may be a genuinely serious means of calling conventions into question and thus invoking the audience to call into question their own problematic expectations.

## Proteolytic Processing of Cryptosporidium gp40/15

### Mariam Savabi Dr. Jane Wanyiri, Research Supervisor, Tufts University

Cryptosporidium is a parasite that causes diarrheal disease particularly in immunocompromised patients such as malnourished children and those that suffer from HIV/AIDS. The parasite is transmitted via the oro-fecal route, most commonly through contaminated water supplies. Cryptosporidium sporozoites attach to and invade intestinal epithelial cells. Gp40/15 is a glycoprotein that is proteolytically cleaved into gp40 and gp15

which are involved in attachment of sporozoites to host cells. The protease which cleaves gp40/15 is subtilisin-like but has not been identified yet. Two putative subtilisin-like proteases CpSUB1 and CpSUB2 have been identified in the Cryptosporidium genome and are candidate proteases for cleavage of gp40/15. The overall goal of this study is to determine which enzyme, CpSUB1 or CpSUB2, is responsible for the cleavage of gp40/15. The purpose of my project is to clone, express and purify different recombinant domains of the CpSUB1 and CpSUB2 in order to raise antibodies to the different recombinant domains of the proteins. Antibodies to some of these domains are available and others will be made by immunizing mice with the purified recombinant protein expressed in *E. coli*. These antibodies will be used for Western blots, immunoprecipitation and immunofluorescence assays. Once the enzyme responsible for cleavage of gp40/15 has been identified, inhibitors can be tested to determine if they can block processing of gp40/15 and attachment of the parasite to host cells. If successful, these inhibitors can be developed as potential drugs for treatment of cryptosporidiosis.

# Rhetorical Strategies for Media Use and College Voter Motivation in a Local Election

#### Michael R. Vander Vort Dr. Elizabeth M. Clark, Research Supervisor

It is a maxim in education, media-communication, and political science disciplines, "College students do not vote." This study sought to discover which media and what kinds of media rhetoric motivated the college students who did vote for a proposed smoking ban in a rural Midwestern college city. The project investigated personal communication (including e-mail), television, radio, print media, and other types of communication for their effectiveness in motivating college students to vote. The research subjects were voluntary, self-selected, respondents to an online survey conducted using the student e-mail system at Truman State University.

### Effects of Forest Management on Small Mammal Communities at Sugar Creek Conservation Area

# Kenneth Wallen Dr. M. Scott Burt, Research Supervisor

Anthropogenic disturbances are capable of affecting the diversity of mammal communities essential for ecosystem development, and sustainability. This study assessed small mammal populations and communities of Sugar Creek Conservation Area alongside the habitat structure created by the current trends of forest management by the Missouri Department of Conservation. Findings from habitat surveys found significant differences among habitat structure between treatment groups, although significant, they were not entirely unexpected based on treatment prescriptions. Simpson's Indices were low throughout all treatment areas (0.18). Although results would indicate unfavorable habitat for forest floor small mammals, these findings appear uncertain and cannot be entirely contributed to forest management.

### Sex and the Aging Woman: The Everyday Erotic in Spence + Lila

#### Brittany Nielsen Watson Dr. Linda Seidel, Research Supervisor

As life spans increase, society has been forced to change its views on the sexuality of women after menopause, after which sex no longer serves the function of procreation and, to a large part of society, is no longer acceptable or worth acknowledgement. This paper examines the sexuality of Lila in Bobbie Ann Mason's *Spence + Lila* in conjunction with contemporary self-help books directed at post-menopausal women and their sexuality. This new historicist's approach demonstrates the eroticism and passion felt by women throughout their lives and the resulting sexuality that is often the driving force of a long, fulfilled life.