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The Effects of Server Characteristics on Gratuities Left by Restaurant Patrons

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Sponsor: Dr. Jeff Gibbons

Abstract

This study was conducted to examine the effects of server gender and service quality on the gratuity of restaurant patrons. The participants in this study each received four dining scenarios in a counterbalanced fashion. Two server scenarios (good and bad) were used for each gender (male and female). Each participant was required to list the amount of gratuity they would leave based upon the service provided. The results indicated that gratuity was significantly higher for good service compared to bad service. However, server gender did not significantly affect the gratuity left by restaurant patrons.

WETLAND RESTORATION ON CONVERTED AGRICULTURAL FIELDS IN VIRGINIA: THE EFFECTS OF FIELD CROWNING

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In Virginia, new state wetlands regulations have placed a preference upon wetland restoration to satisfy compensatory wetland mitigation, and prior converted agricultural fields offer many of the best opportunities for success. In the Mid-Atlantic, wetland conversion was accomplished using a combination of field ditching and field crowning where excavated material was deposited in the center of the agricultural field to promote drainage to the ditches. During 1998 and 1999 we studied two phases of an Atlantic white cedar restoration on abandoned agricultural fields located contiguous to the Great Dismal Swamp in Chesapeake, Virginia. Transects were established and 45 sample plots were sited in each phase to represent high field crown, transition zone, and low ditch zone. At each sample plot 0.25 m² vegetation clip plots were harvested at the peak of growing season. Nine groundwater hydrology wells per phase were measured and related to the elevation of each sample plot to provide hydrology data. While total biomass for phase 1 (517 ± 256 g/m²) and phase 2 (599 ± 299 g/m²) were not different, the zones where the majority of the biomass was found were. Related elevation and hydrology data suggest that the degree of field crowning may dictate the hydrologic regime, and thus the vegetative biomass.

The Fading Affect Bias is Not Driven by Participant Beliefs

Area: Psychology, Social Sciences, Oral Presentation

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Goals: The fading affect bias refers to the finding that negative emotions fade faster in memory than positive emotions. This experiment was designed to test whether the fading affect bias was caused by participants' beliefs about how emotions change in memory.

Method: Participants. Sixty-nine undergraduates participated in this experiment in exchange for extra credit.

Participant Belief. At the beginning of the semester, participants completed an omnibus packet of surveys, including a 6-item survey assessing participants' beliefs about memory. One item asked participants to describe their belief concerning how emotions change in memory. The five choices given to participants were: Positive emotions fade more in memory than negative emotions; Negative emotions fade more in memory than positive emotions; Positive and negative emotions fade equally in memory; Neither positive or negative emotions fade in memory; Other (please specify).

Memory Retrieval. In a seemingly unrelated experiment, participants were asked to retrieve 6 autobiographical memories (3 positive and 3 negative events). Participants were asked to rate how emotional each event was at the time that it occurred and at the time of retrieval. The difference between these ratings was used as a measure for how much the emotion had changed over time (fading affect).

Results: Data Analysis: The data were entered into a 2 (Positive vs Negative) X 3 (Belief) Analysis of Variance with the fading affect measure as the dependent variable. Neither the main effect of belief, $F(2, 22) = 0.77$, $MSE = 1.88$, $p > .05$, nor the interaction between belief and initial event valence was significant, $F(2, 44) = 0.30$, $MSE = 1.53$, $p > .05$. Negative affect consistently faded more than positive affect regardless of participants' beliefs. Discussion: These results indicate that the fading affect bias is not driven by participants' beliefs about how emotions change in memory.

Modification of Low-Cost Adsorbents for Chromate Removal from Aqueous Media

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Hexavalent chromium species is a skin and mucous membrane irritant that is recognized by the International Research on Cancer as a pulmonary carcinogen. The widespread use of chromium in industrial applications such as leather tanning, metallurgy and plating has lead to its introduction into soils and waters. The greatest exposure to hexavalent chromium occurs during chromate production, chrome plating and stainless steel welding. The major source of chromium in aquatic systems is domestic wastewater effluent. The objective of this study is to examine the adsorption capabilities of low-cost adsorbents such as activated carbon (Calgon Filtrasorb 400), two naturally occurring zeolites (clinoptilolite and chabazite) and synthetic zeolites (13X and 5A) for chromate removal from aqueous media. The adsorbents improved sorption capacities by treating them with 0.1 M solutions of FeSO₄. Batch adsorption studies were conducted to evaluate the adsorbent ability to remove chromate from water. In a batch sorption experiment, approximately 40% of the 50 ppm chromate solution was significantly removed by using activated carbon and molecular sieves 13X modified with FeSO₄ after reaching a 72 hour equilibrium.

Developing New Measures of Reading Comprehension and Phonemic Awareness
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The purpose of the present study was to validate new, group-administered measures of reading comprehension and phonological awareness by correlating scores with standardized, individually-administered measures. The reliability sample currently includes 38 undergraduate students from a small, Southeastern liberal arts university. Participants completed a new 38-item questionnaire for which they supplied missing words from prose passages to tap reading comprehension. Additionally, they completed a new 40-item phoneme counting questionnaire to tap phonemic awareness. A sub-sample of 13 participants also completed the Word Attack and Passage Comprehension subscales from the Woodcock Reading Mastery Tests (Woodcock, 1987) to establish validity for the new measures. The Woodcock exercises and author-developed questionnaires were completed in a counterbalanced manner. The goals of the present study were to establish reliability of the new measures and to establish validity via correlations with standardized measures. Preliminary results indicate that the 40-item phoneme counting questionnaire is highly reliable, with a coefficient alpha of .87. Additionally, the measure is valid as indicated by a significant positive correlation with the Woodcock Word Attack subtest, $r = .56$, $p < .05$. The reading comprehension questionnaire is moderately reliable, with a coefficient alpha of .58. Additionally, a weak correlation emerged between this scale and the Woodcock Passage Comprehension subscale, $r = .36$, $p > .05$. This may be due to the small validation sample size for the data collected to date. Results indicate that the phoneme counting scale is a reliable and valid measure of phonemic awareness that can be used in future settings. However, a larger sample is needed to validate the reading comprehension measure. These preliminary results suggest that the new measures developed here, especially the measure of decoding skill, are appropriate for use in future research.

Study of Low-Cost Adsorbents for Lead Removal

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Human lead exposure results from lead plumbing materials such as solder, brass fittings, service lines, crumbling and chalking lead-based paint, airborne lead particulates released by industrial or waste elimination emissions, and fallout of decades of leaded gasoline emissions. Among U.S. children aged 1-5 years between 1991 and 1994, the mean blood lead level was 2.7 $\mu\text{g/dl}$, and 890,000 of these children (4.4%) had blood lead levels $> 10 \mu\text{g/dl}$, the level of health concern for children. Overall evidence from a meta-analysis established a strong link between low-dose lead exposure and intellectual deficit in children. Above this level, adverse health effects range from upset stomachs, irritability, constipation, and damage to organs, including the nervous system and the brain; high lead levels can be fatal. The objective of this study is to compare and evaluate different types of low-cost adsorbents for lead removal from aqueous media. Adsorbent materials such as activated carbon (Calgon Carbon Filtrasorb 300 and 400) and naturally occurring zeolites (clinoptilolite and chabazite) were selected because of their relative low cost. Molecular sieves (13X and 5A) were selected because they provide a basis for comparison with previous studies and represent well-characterized materials. The relative rate for lead adsorption was: 13X $>$ chabazite $>$ clinoptilolite $>$ 5A $>$ activated carbon $>$ modified clinoptilolite. Modeling lead adsorption by different adsorbents using the Langmuir and Freundlich isotherm expressions helps compare the affinity of each adsorbent for lead and determine the adsorbents' capacity for lead removal from aqueous media. 13X, 5A, and

activated carbon best fit the Langmuir isotherm expression where every adsorption site is theoretically equivalent and independent. The zeolites, both naturally occurring and surface modified, best fit the Freundlich isotherm expression where adsorption sites are theoretically nonuniform, either due to pre-existing differences or due to repulsive forces between adsorbed molecules.

Remediation of Mercury using Low-Cost Adsorbents

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Contamination of aqueous streams with mercury is a serious problem due to the high toxicity of the metal and its compounds. Sources of mercury contamination include industrial scrap and waste materials, such as discarded dental amalgam, batteries, lamps, switches, measuring devices, and wastes and sludges generated in laboratories and electrolytic refining plants. Methods of remediation of mercury contaminated sites include thermal treatment, leaching procedures, electrolysis, or a combination of these methods if additional contaminants are present. These methods are usually costly and time consuming. Therefore, batch adsorption studies are conducted to compare and evaluate different types of low-cost adsorbents for mercury removal from aqueous media. The selection of adsorbent materials such as activated carbon (Calgon Filtrasorb 400) and naturally occurring zeolite (clinoptilolite and chabazite) was chosen because of their relative low cost. The selection of molecular sieves (13X and 5A) was chosen because they provide a basis for comparison with previous studies and represent well-characterized materials. The data show that the native form of activated carbon and chabazite as low-cost adsorbents gives great promise for mercury remediation.

The effect of permafrost melting on nutrient cycling and carbon exchange in the discontinuous permafrost zone of Canada.

Melissa Mills

Dr. Gary Whiting

It is estimated that 50% of Canadian soil contains permafrost (permanently frozen ground) and a majority of this is located in peatlands. The southern limit of permafrost of western Canada is currently receding to the north, creating a landscape region of discontinuous permafrost coverage. This melting is altering the carbon and methane flux, nutrient chemistry, and organic accumulation in this region. Low temperatures in high latitude regions and in combination with high soil moisture slow down the activity of microbial communities such that anaerobic decomposition is the primary pathway of carbon metabolism. Predictions of increased warming at higher latitudes have been made due to elevated greenhouse gases in the atmosphere, which would increase the rate of permafrost melting. At the present, these frozen peatlands are a net uptake for atmospheric CO₂, sinking approximately 150 Gt/yr of carbon from the atmosphere which provides a pool for 1/3 of the world's carbon but climatic change could accelerate peat decomposition, increase organic matter cycling, and nutrient availability and cycling. My research will study the correlation of nutrient availability, methane gas production, soil composition, temperature, pH, and age within 7 melt features. Initial sampling indicates a positive correlation with an increase of depth and pH, while conductivity and pH are shown to be negatively correlated. Water chemistry analysis of acetate, formate, nitrate, sulfate, and phosphate indicate no statistical difference with increasing water depth but show change as you move from the oldest region of the melt to the newly melted zones.

Perception of the Justice System

Area: Psychology, Social Sciences, Oral Presentation

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Dr. Jeffrey A. Gibbons, Christopher Newport University

Goals: This experiment was conducted to obtain a representation of how African-American students feel about the justice system.

Method: Participants. Fifty-nine people participated in this experiment. They were students in a general psychology class. Their ages ranged from eighteen to twenty-three. They each signed consent forms and were told that they could quit at any time.

Materials. Two short stories were created that told of a crime that was committed. Both stories had the same character and the same crime. Each story had either a positive or a negative outcome (the criminal left prison reformed or a hardened criminal). Next, participants were given a survey that assessed their attitudes towards prison and the severity to which they would punish various crimes.

Procedure. The participants were given a packet that consisted of the two surveys and one of the stories. They read the story and then wrote how they felt about it. They then were given the two surveys to complete.

Results: Data Analysis: Several t-tests were performed on the survey data to assess whether the positive and negative stories impacted participants' ratings.

Gang Violence: Story type had a significant effect on the perception of gang violence, such that the negative story increased the perception of gang violence in prison, $t(57) = 3.09$, $p < .001$.

Burglary: Story type had a significant effect on the severity of punishment that participants would recommend for the crime of burglary, such that the negative story led to harsher sentences, $t(57) = 1.92$, $p < .01$.

Discussion: In general, most African-Americans in this survey expressed moderate levels of distrust of the justice system. It is clear that the stories that participants were exposed to affected their immediate perception of the justice system.

Affects of Hydrology on the Peat Underlying Atlantic White Cedar Swamps

Patricia M. Duttry

Faculty sponsor-Robert B. Atkinson, PhD, Associate Professor of Biology

Atlantic white cedar (*Chamaecyparis thyoides* (L.) B.S.P.) occur in the Atlantic and Gulf coastal plains on organic soils. Hydrologic alteration for agriculture and silviculture has contributed to the decline in acreage, and restoration requires reestablishment of appropriate water levels and organic matter accumulation rates. The soil was examined in six cedar sites and two compensation sites on former agricultural fields in Virginia and North Carolina. The organic framework of the soils at the naturally occurring stands (93.7 to 97.1% OM by wt.) results in low bulk densities ($< 0.30 \text{ g/cm}^3$). Mean organic matter contents for the compensation sites were significantly lower than the other sites (24.4 and 28.6%; max. bulk density 0.81 g/cm^3). The mean organic matter content by site is significantly related to the mean annual water table level by site ($R^2 = 0.98$ for the four least disturbed sites). Soil respiration was measured from six cores from each site under laboratory conditions to examine how water level affects decomposition at the sites which were hydrologically altered.. Three cores from each site remained drained and three were saturated prior to CO_2 gas extraction and measurement via gas chromatography. Mean CO_2 flux upon drawdown was found to be positively related to the number of days annually that field hydrology is within 15 cm of ground surface, especially for the natural cedar sites growing on peat ($r^2 = 0.73$). Measurement of peat accretion was conducted using ^{137}Cs and ^{210}Pb analysis. Vertical accretion is greater at the wetter sites but differences in bulk density at the sites studied complicate analysis of organic matter and carbon accretion. Management of the peatlands to maintain shallow water table levels for longer periods of time will reduce carbon and organic matter loss via aerobic soil respiration and maintain or enhance the peat deposits important to Atlantic white cedar ecosystem self-maintenance.

Can We Have Knowledge of Moral Absolutes?

Andreas Houpos

Faculty Sponsor: Dr. Lori Underwood

In the essay I wish to present, I set out to answer the question: "Can we have knowledge of moral absolutes?" My thesis shall be a negative claim - namely, that we cannot have such knowledge. In defense of my thesis, I shall discuss three principles that I believe to be evidentiary in my favor. These three principles are hermeneutics, emotivism and epistemological nullity.

I shall discuss how hermeneutics has played a part in downplaying universalisms set forth during the Enlightenment, making subjective claims more prominent through interpretive practices. Along with this sense of interpretation, I shall argue, emotive moral theory seems to emphasize the subjective properties of moral claims. In combination with a hermeneutic system, more popular attitudes concerning moral dilemmas are made mainstream and can sometimes even be claimed to be moral absolutes. Finally, I shall demonstrate how absolutist claims of moral epistemology lack an objective truth component, and are therefore epistemologically null. My conclusion is that we cannot have knowledge of moral absolutes because they do not exist for us to have knowledge of.

This is an argument that I feel is strong and based in common-sense understandings of such things as relativism and uncertainty. While attacking claims of moral absolutism, I do not discard the value or reality of that which we call morality. We can still be justified in moral beliefs, but we cannot say that we know that they are true beliefs - at least not in the absolutist sense. I shall simply argue that absolute moral truths are not - cannot be - objective or, for that matter, real.

Environmental Enrichment for a Captive Loggerhead Sea Turtle, *Caretta caretta*

Stephanie Day

Faculty Sponsors: Dr. Andrew Velkey, II, and Dr. Barbara Savitzky

FEMALE CHARACTERS ARE VIRTUOUS FOR GENDER ASCHEMATIC INDIVIDUALS AND THEY ARE MEMORABLE FOR GENDER SCHEMATIC INDIVIDUALS

Brooke D. Sander, Janet M. Phillips, Kellea J. Hester, Renea P. Page, Sue E. Hinnefeld, Kelly B. Cartwright, Jeffrey A. Gibbons (Christopher Newport University), and Nicole M. Traxel (University of Wisconsin Milwaukee)

Participants in the current study were given scenarios with male and female lead characters portrayed in positive and negative stories. If the main character was male, the supporting character was female and vice versa. Participants' sex role stereotypes were assessed. An interpolated task was used to assess participants' need for cognition (NFCS), and aggressive tendencies. After reading the stories, participants completed the BSRI (Bem, 1974), the NFCS (Cacioppo, Petty, & Kao, 1984), and the Aggression Scale (Mochizuki, 2000). Participants answered a story survey asking for details including character gender. The entire process took 40 minutes to complete. While gender schematic participants were expected to remember character gender most accurately in positive stories when the main character was male, gender aschematic participants were expected to remember character gender most accurately in positive stories where main characters were female.

The proportion of characters whose gender was correctly remembered was placed into a 2 (Lead Character Gender) x 2 (Stories Affect) x 2 (Participants' Schema) mixed-factorial design and the data were analyzed via ANOVA. Aschematic participants remembered character gender best when the story was positive and the character was female and when the story was negative and the lead character was male. In contrast, gender schematic participants remembered character gender best when the lead character was female, independent of story affect.

The Hip Hop Rapper's Role as African Griot in American Society

Catherine Hauke

Faculty Sponsor: Dr. Clyde Brockett

Music originating from America's black communities has always had an accompanying subculture reflective of the political, social and economic conditions of the time, whether the subculture was blues from the oppressed south or jazz from the decadent streets of New Orleans. Rap music is no different. This particular music genre emerged from New York City club DJs in the early 1970s as part of the artistic movement known as hip hop: the African-American subculture that became a major form of self-expression for black youths. The art of rapping - reciting rhymes over rhythm-based music - has roots imbedded deep within African culture. Music is an important feature of African oral traditions, and poetry exists almost exclusively in song form. The griot (gree'-oh) is the traditional storyteller in Western African societies. This person provides deep insights into the values of a people and their social structure through narratives. Many griots amplify their storytelling by playing instruments and singing in words and sounds that celebrate the events recounted. In this paper I consider how the rapper has in a real sense inherited the role of traditional African griot in America by reflecting the experiences and expressions of the young African-American community.

Religious Addiction: Obsession with Spirituality

Cheryl Z Taylor

Sponsor: Dr. Frank J. MacHovec

Religious addiction is a newly discovered addiction, but it has been with humanity since the beginnings of religion and spirituality. It knows no age, race, gender, or creed, and it destroys lives. Research for this presentation included personal interviews with experts in the field of addiction and a research of literature and scientific journals on substance and behavior addictions.

After a discussion of similarities and differences between substance and behavioral addictions, the problem of religious addiction is explored. Although this addiction has unique characteristics and symptoms, there is a surprising similarity to alcoholism with the characteristic downward spiral. As with any addiction, certain types of people are more at risk for it. Religious addiction does affect one person, but it can be a family disease. A discussion of the addict, codependent spouse, and children are included in this presentation. Children are not immune to this addiction, and they carry emotional scars throughout their lives.

Without recovery from religious addiction the addict will continue through several stages until the end is finally reached. The end is often hospitalization or death by suicide. Recovery should include intervention, therapy, and support groups for

The environments of captive animals are generally simpler than natural environments and can lead to abnormal behavioral patterns, most notably repetitive and stereotyped locomotion. Environmental enrichment attempts to enhance the welfare of captive animals by providing novel stimuli designed to induce natural, species-specific behaviors and/or reduce atypical behaviors. Common enrichment strategies include the introduction of objects, altering the enclosure, and forcing animals to use natural foraging behaviors. Environmental enrichment strategies have been well-studied in mammals. However, little research has been conducted with reptiles and amphibians. Previous studies have indicated that reptiles benefit from environmental enrichment. The current study focused on four different methods of enrichment with a captive loggerhead sea turtle (*Caretta caretta*) with a history of maladaptive behaviors, including repetitive swimming into and against the acrylic wall of the aquarium. Enrichment consisted of the presentation of two non-food and two food-based manipulables over the course of nine weeks. Using an ABA design, experimental treatments were preceded and followed by a baseline treatment. The sessions were videotaped and analyzed for specific behaviors, including types of locomotion, breathing, biting, floating, resting, and contact time with the front acrylic wall of the enclosure. Preliminary results indicate reduced contact times with the acrylic wall during the treatment sessions and an increase in species-specific behaviors. Food-based manipulables elicited more response than did non-food manipulables. This research could serve as a model for effective environmental enrichment for captive sea turtles.

EXAMINING BODY IMAGE AND SELF-ESTEEM ACROSS PARTICIPANT ETHNICITY AND BRAIN INJURY STATUS: ONE-YEAR LATER

Laura L. Nichols, Jeffrey A. Gibbons (Christopher Newport University), and Mona Tiernan (Riverside Rehabilitation Institute)

Reel (2000) found that African-Americans showed higher self-esteem than Caucasians, while Steadman-Pare, Colantonio, Ratcliff, Chase, and Vernich (2001) examined the positive outcomes of individuals with brain injuries. The prior study examined body image and self-esteem across ethnicity and brain injury. African-Americans scored higher in self-esteem and they scored lower on negative body image compared to Caucasians and other ethnicity groups. Participants with severe brain injury had lower self-esteem than individuals with mild or no brain injury. The current study was conducted after one-year had passed. The results were similar to the data in the prior study.

Removal of 2,4-Dichlorophenol from Aqueous Solutions Using Organo-Silicate Materials: Equilibrium and Kinetic Studies

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Dichlorophenols (DCP) are aromatic compounds used as antiseptics, herbicides, wood preservatives, and in the paper and pulp industry. They are also intermediates in the synthesis of other chlorinated phenols. Polychlorinated phenols (PCP) are formed during the disinfecting process of drinking water and wastewater. Chronic exposure to DCP may result in nervous disorders, or liver and kidney damage. Chlorinated phenols have been identified in industrial effluents, soils and drinking water; they are toxic to aquatic organisms. Important by-products of chlorinated phenols are dioxins. The Environmental Protection Agency (EPA) has placed 2,4-dichlorophenol (2, 4-DCP) on the drinking Water Contaminant Candidate List with a proposed safe limit of 3 mg L⁻¹. The objective of this study involves the use of synthesized adsorbents for the removal of 2,4-dichlorophenol (DCP) from an aqueous media. The materials synthesized for this study were organo-silicate materials (OCS). The synthesis of these materials form hexagonal mesoporous lattice structures with organic components on the lattice structure giving them their hydrophobic and organophilic properties. These adsorbents are studied to determine their ability to remove DCP from an aqueous media through batch adsorption studies. Activated carbon was included in the study as a basis for comparison with a well-characterized material. All OCS materials remove more than 90-percent of the 2,4-DCP after 72 hours.

the addict and the family. The addict is taught a new and healthier way of seeking spirituality, and by doing so, receives a new lease on life.

THE EUROPEAN MONETARY UNION (EMU) AND THE EURO

Claire Neaves

Sponsor: Dr. George Zestos

The end of the Second World War found Europe divided and totally destroyed. When the United States decided to give massive aid to Europe through the historical Marshall Plan, it soon realized that it was difficult to successfully implement its objectives to economically reconstruct Europe. The reason being that there were many trade barriers among the European countries. In 1952 with the Treaty of Paris, six European Union countries formed the European Coal and Steel Community (ECSC). With the ECSC, the six European countries France, Germany, Italy, Belgium, Netherlands, and Luxembourg were able to establish an efficient market for coal and steel. The six ECSC countries decided to extend the success of the ECSC to other areas. Then in 1957, with the Treaty of Rome, they established the European Economic Community (EEC) and the European Atomic Energy Community (EURATOM). These three treaties indeed created a common market in practically every commodity. European integration, however, could not have been completed if each EC country had its own currency. For this reason, the EC countries agreed with the Maastricht Treaty of 1993 to promote further integration by forming a monetary and economic union. To denote a higher level of integration the EC countries adopted the name of the European Union (EU). To achieve monetary unification and eventually adopt the same currency the EU countries agreed to meet certain economic and monetary criteria dealing with price stability and fiscal discipline. This paper examines the five Maastricht criteria: inflation, interest rates, deficits, national debt, and exchange rates along with the performance of each EU country regarding these criteria. Only countries that met the Maastricht criteria were qualified to become members of the EMU. The purpose of the paper is to demonstrate which countries were able to meet and continue to meet the criteria by looking at economic historical data for the five economic variables. By February 2002 the EMU will be complete and the Euro will become along the dollar and the yen one of the most important currencies in the world. The success of the Euro however is not guaranteed. Therefore we will examine in this paper how well the member countries performed not only in terms of price and fiscal stability but also in reference to two economic variables, the unemployment rate and the real per capita GDP.

Does Having Managerial Qualities Affect One's Perception of Fairness, Responsibility, Consequences, and Commitment in the Workplace?

Authors: Erika F. Congleton, Andrea N. Dunn, and Brandi M. Henry

Faculty Sponsor: Jeffrey A. Gibbons

The goal of the current experiment was to test whether or not the tolerability of a supervisor, contrasting information, and having managerial qualities would affect ratings of fairness, consequences, and employee commitment. Participants played the role of a third party observer who witnessed a fellow employee being reprimanded for an ordering error. One of four vignettes was given to each participant. In half of the vignettes, participants were told that the supervisor who reprimanded the employee was usually tolerable while the other participants were told that the supervisor was usually intolerable. Half of the participants in each condition (tolerable or intolerable) were told that the employee was guilty for an ordering error while the other half of the participants were told that the employee was not guilty for the error. Participants read the vignette and answered a questionnaire regarding perceived fairness, employee and supervisor consequences, and commitment to the company. Participants were then given a second vignette containing contrasting information about the employee's guilt and they were asked to complete another questionnaire identical to the first one. Ratings of perceived fairness, consequences of the employee and the supervisor, as well as employee commitment to the company were placed into a 2 (Time) x 2 (Tolerability) x 2 (Initial Guilt) mixed factor design and the data were analyzed using univariate ANOVAs (analyses of variance). Results showed that the contrasting information seemed to polarize participants' responses, which created extreme responses at Time 2. These results suggest that supervisors should gather all possible information before reprimanding an employee, especially when in front of other employees. Results also showed that the level of commitment decreased when the supervisor was usually intolerable which suggests that employees are more committed to their company when they have supervisors that are tolerable.

The Utilization of Constructive Linguistic Practices in the Self-Help Genre

Kelly Garner

By researching a variety of works in the self-help genre this paper will extract a common feature, namely, the utilization of constructive linguistic practices. It will be claimed that what is at work in self-help literature is a linguistic re-empowerment. By providing the readers with new linguistic structures to describe themselves, and with which they may interpret their experiences, these works empower the reader to enter into new linguistic paradigms. New linguistic paradigms increase the variety, flexibility, and versatility of possible world interpretations allowing individuals to be more creative in their social

and personal experiences. The problems many readers of the self-help genre seek haven from are created by the way that they use language. Certain problematic linguistic habits, such as victim language and conspiracy talk, encourage the usage of additional problematic words and behaviors. When someone uses problematic language in an interpretation they are establishing a sort of precedent for the kinds of things they will be able to say in future interpretations.

When certain words are used they open up a passage to the entire linguistic paradigm of which they are a part. Saussure taught us that words only hold their value as parts of a linguistic system. Much like a railway switch, words and phrasing determine the direction that the discourse will travel. When composing an interpretation of an experience the usage of certain words will provide access to these systems and create possibilities for further interpretation. This paper claims that the use of certain words and problematic hermeneutic practices are responsible for many social and personal difficulties that are currently treated by psychologists and health care professionals.

The Use of Personal Data Assistants in Improving Everyday Memory Reggie Y. Andrews, Winston-Salem State University
Sponsors: Dr. Richard Walker, Winston-Salem State University Dr. Jeffrey A. Gibbons, Christopher Newport University
Problem or Major Purpose. Researchers have been interested in the use of memory aids (Herrmann & Petro, 1990). The goal of this study was to determine if the use of personal data assistants (PDAs) would help students in everyday memory tests.
G. Procedure: Participants. Thirty-three undergraduates participated in this experiment.

The Prominence of Racial Issues in Alabama Gubernatorial Campaigns
Donna K. Silva
Faculty sponsor: Buck Miller

Objective. The purpose of this research paper is to determine if there is a relationship between the prominence of racial issues within Alabama's gubernatorial campaigns and the passage of federal civil rights legislation. The hypotheses tested are: (1) The number of explicit racial issues will dominate the 1954 and 1966 Alabama gubernatorial election campaigns while the number of implicit and nonracial issues will be lower. (2) In Alabama's 1982 gubernatorial election campaign, the occurrence of explicit racial issues is expected to be low while implicit and nonracial issues are expected to dominate the campaign. **Methods.** A content analysis of newspaper articles from the Birmingham News was conducted from September 1st through Election Day in November for the years 1954, 1966 and 1982. The content analysis was based on key words. If the title of an article mentioned the candidate's names or contained references to the gubernatorial race, it was analyzed. The content analysis was performed to reveal explicit, implicit or nonracial issues. Issues were graphed according to their classification and the number of times mentioned in that given year.

Results. Findings for the 1954 campaign did not support the hypothesis, explicit and nonracial issues were mentioned almost equally. The research findings were devoid of implicit racial issues. The analysis of the 1966 and 1982 campaigns supported the hypotheses. **Conclusion.** Landmark events in the civil rights movement, such as Brown v. Board of Education, had little impact on the presence of explicit racial issues in Alabama's 1954 gubernatorial campaign rhetoric. However, the reduction in the use of explicit racial language between the 1966 and 1982 campaigns indicates a change in Alabama's political vocabulary, possibly in response to federal legislation and changing norms within the South

The Use of Personal Data Assistants in Improving Everyday Memory

Reggie Y. Andrews, Winston-Salem State University
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Dr. Jeffrey A. Gibbons, Christopher Newport University

Problem or Major Purpose. Researchers have been interested in the use of memory aids (Herrmann & Petro, 1990). The goal of this study was to determine if the use of personal data assistants (PDAs) would help students in everyday memory tests.

Procedure: Participants. Thirty-three undergraduates participated in this experiment.

Procedure. Seventeen participants received PDAs for 6 weeks while 16 participants served as controls. Students were contacted weekly to monitor their progress. Participants were asked to complete a barrage of real world memory tests before and after the monitoring period (names, telephone numbers, weekly schedules). Students were also asked to keep track of memory errors during the monitoring period.

Data Analysis. We performed 2 sets of t-tests on the data. The first set was on the initial data to determine if there were any initial group differences. The second set was on the data collected at the end of the study, to determine if the PDA use affected memory.

Results: Memory for telephone numbers and weekly schedules at final testing. The PDA group remembered significantly more telephone numbers than the control group, $t(31) = 2.06$, $p < .05$. The PDA group remembered more events in their weekly schedule than the control group, $t(31) = 3.69$, $p < .01$. No group differences were obtained in data collected prior to the monitoring period.

Number of absences. The PDA group missed significantly fewer classes during the recording period than the control group (MPDA=1.5, MControl = 3.1), $t(31) = 3.13$, $p < .01$

Conclusions and Implications: The results suggest that PDAs can be used to improve the everyday memory of college students. Future research will focus on how these devices can be incorporated into the classroom.

PAIDEIA DETAILED SCHEDULE: Conference Program, April 6th 2002

Conference Registration and Coffee 8:30-9:00 SC Alumni Room

Each presenter will be allotted 20 minutes to present and 5 minutes following the presentation to take questions.

Concurrent Sessions A 9:00 a.m. - 10:15 a.m.

I. Ratcliffe 103 (George Zestos, presiding)

"The European Monetary Unity (EMU) and the Euro"

(Claire Neaves - Christopher Newport University/ Faculty Sponsor: George Zestos)

"Female Characters are Virtuous for Gender Aschematic Individuals and They are Memorable for Gender Schematic Individuals"

(Brooke D. Sander, Janet M. Phillips, Kellea J. Hester, Renea P. Page and Sue E. Hinnefeld - Christopher Newport University/ Faculty Sponsors: Kelly B. Cartwright, Jeffrey A. Gibbons, and Nicole M. Traxel (University of Wisconsin-Milwaukee))

"The Prominence of Racial Issues in Alabama Gubernatorial Campaigns"

(Donna K. Silva - Christopher Newport University/ Faculty Sponsor: Buck Miller)

II. Ratcliffe 104 (Rob Atkinson, presiding)

"Wetland Restoration on Converted Agricultural Fields in Virginia: the Effects of Field Crowning"

(Jeffrey W. DeBerry - Christopher Newport University/ Faculty Sponsor: Robert B. Atkinson)

"Affects of Hydrology on the Peat Underlying Atlantic White Cedar Swamps"

(Patricia M. Duttry - Christopher Newport University/ Faculty Sponsor: Robert B. Atkinson)

"Can We Have Knowledge of Moral Absolutes?"

(Andreas Houpos - Christopher Newport University/ Faculty Sponsor: Lori Underwood)

Concurrent Sessions B 10:30 a.m. - 11:45 a.m.

I. Ratcliffe 103 (Kelly Cartwright, presiding)

"The Effects of Server Characteristics on Gratuities Left by restaurant Patrons"

(Amanda Slingerland -Christopher Newport University/ Faculty Sponsor: Jeffrey A. Gibbons)

"Does Having Managerial Qualities Affect One's Perception of Fairness, Responsibility, Consequences and Commitment in the Workplace?"

(Erika F. Congleton, Andrea N. Dunn and Brandy M. Henry - Christopher Newport University/ Faculty Sponsor: Jeffrey A. Gibbons)

"Developing New Measures of Reading Comprehension and Phonemic Awareness"

(Krystall Dunaway - Christopher Newport University/ Faculty Sponsor: Kelly B. Cartwright)

II. Ratcliffe 104 (Peter Knipp, presiding)

"The Effect of Permafrost Melting on Nutrient Cycling and Carbon Exchange in the Discontinuous Permafrost Zone of Canada" (Melissa Mills - Christopher Newport University/ Faculty Sponsor: Gary Whiting)

"Environmental Enrichment for a Captive Loggerhead Sea Turtle *Caretta caretta*"
(Stephanie Day - Christopher Newport University/ Faculty Sponsors: Andrew Velkey II and Barbara Savitsky)

"Religious Addiction: Obsession with Spirituality"
(Cheryl Z. Taylor - Christopher Newport University/ Faculty Sponsor: Frank MacHovec)

Luncheon* 12:00 p.m. - 1:15 p.m. Alumni Room

Concurrent Sessions C 1:30 p.m. - 3:10 p.m.

I. Ratcliffe 103 (Bob Colvin, presiding)

"The Fading Affect Bias is Not Driven by Participant Beliefs"
(Jennifer Dwyer - Winston-Salem University/ Faculty Sponsors: Jeffrey A. Gibbons and Richard Walker)

"Examining Body Image and Self-esteem Across Participant Ethnicity and Brain Injury Status: One Year Later"
(Laura L. Nichols - Christopher Newport University/ Faculty Sponsors: Jeffrey A. Gibbons and Mona Tiernan (Riverside Rehabilitation Institute))

"The Use of Personal Data Assistants in Improving Memory"
(Reggie Y. Andrews - Winston-Salem University/ Faculty Sponsors: Jeffrey A. Gibbons and Richard Walker (Winston-Salem University))

"Perception of the Justice System"
(Teaune Vinson - Winston-Salem University/ Faculty Sponsors: Jeffrey A. Gibbons and Richard Walker (Winston-Salem University))

II. Ratcliffe 104 (Tarek Abdel-Fattah, presiding)

"Removal of 2,4-Dichlorophenol from Aqueous Solutions Using Organo-Silicate Materials: Equilibrium and Kinetic Studies"
(Brian Bishop - Christopher Newport University/ Faculty Sponsor: Tarek Abdel-Fattah)

"Modification of Low-cost Absorbents for Chromate Removal From Aqueous Media"
(Joy Butler - Christopher Newport University/ Faculty Sponsor: Tarek Abdel-Fattah)

"Study of Low-cost Absorbents for Lead Removal"
(Kelly Payne - Christopher Newport University/ Faculty Sponsor: Tarek Abdel-Fattah)

"Remediation of Mercury using Low-Cost Adsorbents"
(Stephanie Harris - Christopher Newport University/ Faculty Sponsor: Tarek Abdel-Fattah)

III. Ratcliffe 105 (Lori Underwood, presiding)

"The Hip Hop Rapper's Role as African Griot in American Society"
(Catherine Hauke - Christopher Newport University/ Faculty Sponsor: Clyde Brockett)

"The Utilization of Constructive Linguistic Practices in the Self-help Genre"
(Kelly Garner - Christopher Newport University/ Faculty Sponsor: George Teschner)

last updated: 4/24/02