



THE UNIVERSITY OF
SCRANTON
A JESUIT UNIVERSITY

**Seventh Annual
Celebration
of
Student Scholars**

May 4, 2007

POSTER PRESENTATIONS

**CHRISTINA ANASTASOPOULOS and ANTHONY LENTINI,
Operations and Information Management/Electronic
Commerce**

**Rose Sebastianelli and Nabil Tamimi, Operations and
Information Management**

**“Online Retailing: Do Web Assurance Seals Make a
Difference?”**

We benchmark a sample of up to 100 retailing websites to determine whether differences exist between those with and without Web Assurance Seals. These sites are compared on factors related to *accessibility, reliability, ease of ordering, convenience* and *product content*. Online retailers of sporting goods, shoes and specialty items are examined.

JESSICA BAUCK, Occupational Therapy

Rita Cottrell, Occupational Therapy

**“Transition Planning: One Student’s Perceptions of the
Individual Transition Plan”**

This study was conducted to look at the Individual Transition Plan (ITP) of a high school student with a physical disability. The student shared her perceptions of her upcoming transition to post-secondary life and how she felt her ITP has prepared her for transitioning.

MARA BECKAGE, Theology/Eastern Christian Studies

Maria Poggi Johnson, Theology

Josephine Dunn, History

“Iconography – Theology in Color”

LAUREN E. BOTTO, Occupational Therapy

Marlene Morgan, Occupational Therapy

“Relationship of Activity Participation to Perceived Balance Confidence in Community-Dwelling Elders”

This study explores the relationship between activity participation and perceived balance confidence in community dwelling seniors. A convenience sample of 28 seniors was recruited, who then completed a demographic questionnaire, the Activities – specific Balance Confidence Scale, and the Activity Card Sort. Implications include wellness, aging in place, and maintaining independence.

KATHRYN O. BOYCE, Occupational Therapy

Rita Cottrell, Occupational Therapy

“Women with SCI: Active Recreation and Well-Being, a Qualitative Study”

This qualitative analysis explored the relationship of active recreation and well-being for women with spinal cord injury. Distinctive viewpoints on the role of active recreation in the woman’s lives were presented. Findings of this study maintain the importance of supporting active recreation in rehabilitation programs for women with physical disabilities.

JOE BRAGUE, Biology

Maria Squire, Biology

“Intra-Species Comparison of Forelimb Bone Morphology in Passerine Landbirds”

This study is characterizing the morphology (length, width, and microarchitecture) of forelimb bones from two species of land birds [Wood Thrush (*Hylocichla mustelina*) and Veery (*Catharus fuscescens*)] collected during migration and breeding. Intra-species morphological differences related to annual cycle (migration versus breeding) and gender are being examined.

JASON BRUBAKER, Criminal Justice

James Roberts, Sociology/Criminal Justice

John McInerney, English

“Broken Window”

My proposal for the Broken Window is a poster and an oral presentation pertaining to the theory. The poster will show how the play connects to the theory. Also, it will show the connections between Criminal Justice and Theater. The oral presentation will be a brief explanation of the theory, and include three short bits from the play.

REBECCA CHESHIRE, Occupational Therapy

Marlene Morgan, Occupational Therapy

“Adolescent Mothering Program: A Single Case Study Analysis”

This qualitative case study analysis uses the perspectives of staff members to provide insight into the nature and complexity of their model adolescent mothering program, as well as examines the importance of the occupation of mothering during adolescence.

KATHRYN (SUMI) CLAMSER, Occupational Therapy

Marlene Morgan, Occupational Therapy

“An Examination of Perceived Stress and Coping Skills in Occupational Therapy Students”

This study examines the existing levels of perceived stress and coping methods used by occupational therapy students at an urban, northeast Pennsylvania university. Perceived stress and coping skills are correlated in order to uncover significant relationships and the effects of coping skills on the students’ levels of stress.

NICHOLAS CONNOLLY, Finance

Ioannis Kallianiotis, Finance

“Predicting European Financial Equity Market Trends”

The main goal of this project will be to make predictions as to what direction the European capital markets will move in the near future with the assistance of the interest rate predictor. When completed, I will be able to tell a U.S. investor whether the German or United Kingdom equity markets will be beneficial to invest in at the current point in time. Forecasting this trend will be the end goal of this paper.

EDWARD DELSOLE, Chemistry

John Deák, Chemistry

“Vibrational Spectroscopy of Water in AOT Reverse Micelles: Molecular Interactions in Interfacial and Bulk-like Domains”

We have used FTIR spectroscopy to probe the molecular interactions of interfacial and bulk waters in AOT reverse micelles. Hydrogen bonding and compositional differences are inferred from separation of the OH band into interfacial and bulk spectra.

AIME DINGEE, Chemistry

Christopher Baumann, Chemistry

“Using Computational Chemistry Methods for the Characterization of Biacetyl Dimers”

The computational chemistry programs Hyperchem and Gaussian are being utilized to study the theoretical characteristics of biacetyl in both monomer and dimer forms. Using the software, calculations involving structure, energy, and excited states have provided information about the nature of biacetyl while providing groundwork for further research and calculations.

NANCY M. DUDA, Occupational Therapy

Marlene Morgan, Occupational Therapy

“The Ethical Implications of Universities Conducting Research with Communities”

This Master’s thesis is a qualitative pilot study that explores the nature of the relationship between universities and communities engaging in collaborative research, and the ethical implications that can arise during a research partnership between these two entities.

NATALIE FALA, Psychology

Christie Karpiak, Psychology

“Perceived Maternal Concern about Weight Corresponds with Body Shame in Securely Attached Daughters”

This study was conducted to determine whether perceived maternal attitudes correspond with body image problems in women with secure attachment styles. College women completed the AAQ, Objectified Body Consciousness Scale, and an item about maternal worry and weight. Significant main effects indicated maternal attitudes relate to body image across attachment styles.

ADRIENNE FALLON, Occupational Therapy

Carol Reinson, Occupational Therapy

“The Contributing Factors to Successful Employment for Individuals with Mental Illness”

Individuals with mental illness have difficulty maintaining successful employment. There are many supports and challenges facing these individuals. I surveyed counselors working in Offices of Vocational Rehabilitation in Pennsylvania to further understand these supports and challenges and why there is a high rate of unemployment among individuals with mental illness.

JACQUELYN FOX, Occupational Therapy

Marlene Morgan, Occupational Therapy

“The Experience of Persons Transitioning from Homelessness in a Community Garden Project: A Qualitative Case Study”

The study investigates the occupational meaning of community gardening for persons transitioning from homelessness. I interviewed four individuals who participated in a community garden project and developed three main themes from data analysis. Implications from this research suggest the use of community gardening as a therapeutic intervention for this population.

YVETTE GARNER, Biology

Janice Voltzow, Biology

“Hanging by a thread: The effects of flow on byssal thread production by the California mussel”

Mussels are bivalve molluscs that live in the rocky intertidal. They attach themselves to the rock with byssal threads, which are secreted by a gland in the foot. To see if the production of byssal threads increased with flow rate, we subjected mussels to varying flow rates in a recirculating flow tank and measured their production.

HEATHER T. HIBBARD, Occupational Therapy

Marlene Morgan, Occupational Therapy

“The Relationship of Student Assessment of Reflective Journaling to Learning Style”

This study aimed to provide insights into the learning style of occupational therapy students and the relationship to the perceived usefulness of reflective journaling by students. Twenty students completed the Kolb Learning Style Inventory and reflective journaling questionnaire. The findings can be utilized to determine students’ perspective of reflective journaling.

PAUL J. HOMNICK, Biology/Premedical

Gary Kwiecinski, Biology

“Functional Morphology of Phyllostomid Bat Verrucae”

Verrucae juxtaposed to the vermilion border of Phyllostomid bats’ lips and chins were studied using standard histological light and scanning electron microscopic techniques. It is hypothesized that these facial structures function as a type of somatosensory organ as suggested by their gross and microscopic structure.

CHRISTINA IRACE, Psychology

J. Timothy Cannon, Psychology

“Environmental Attitudes: Relationships with Right Wing Authoritarianism, Social Dominance Orientation, Political Affiliation, and Moral Reasoning”

This study sought to determine the relationship between environmental attitudes, Right-Wing Authoritarianism (RWA), Social Dominance Orientation (SDO), political affiliation, and moral reasoning. Results showed significant correlations between the environmental measures and political affiliation, as well as moral reasoning. The preceding measures were also correlated with RWA and SDO.

JOSEPH MARCHEGANI, Biochemistry

Joe Vinson, Chemistry

“Quantitative Determination of Polyphenol Content in Whole Grain Foods”

The quantity of antioxidant polyphenol molecules in various whole grain common foods is determined for each of various samples, such as crackers, chips, pasta, and popcorn. It is proposed that these antioxidant molecules are to take credit for the health benefiting properties of whole grain foods, and not simply high fiber content.

ELIZABETH J. MARTORI, Occupational Therapy

Rita Cottrell, Occupational Therapy

“Borderline Personality Disorder: An OT Frame of Reference – A Grounded Theory Approach”

The behaviors characteristic of persons with Borderline Personality Disorder (BPD) have implications for occupational dysfunction in the performance areas of self-care, work, school, and social participation. Based on the theoretical congruence found between occupational therapy (OT) and Dialectical Behavior Therapy, an OT frame of reference was developed for persons with BPD.

JENNIFER McLAREN, Psychology

Thomas Hogan, Psychology

“Correlates of Numerosity Estimation”

Numerosity estimation (NE) has failed to relate to measures of verbal, quantitative, and spatial ability in several previous studies. Those studies administered NE without knowledge of results (KR). This study examined the relationship of NE with KR to measures of spatial and math ability for 71 college students. NE with KR showed low but significant correlations with a math ability test and 1 of 3 spatial tests, but no relationship to other variables.

JENNIFER McLAREN, Psychology

Carole Slotterback, Psychology

“Can any Man be a Superman? An Empirical Investigation of Stereotypical Body Images in Comic Books”

Exposure to “ideal body images” may affect the self concept of adolescent and teenage boys. The purpose of this study is to examine the body images portrayed in comic books, evaluate the gender differences, and assess human attainability. Two raters coded superheroes for body proportions, muscle definition, and skin exposure.

AIMEE McLAUGHLIN and RYAN McLAUGHLIN,

Environmental Science/Biophysics

Janice Voltzow, Biology

“The flow must go on! An interdisciplinary approach to modeling induced flow in gastropods”

Induced flow is a mechanism by which environmental flow enhances ciliary currents through the mantle cavities of certain gastropods. To test the effects of relative heights and orientations of incurrent and incurrent windows on induced flow, we constructed models and used dye to visualize the resulting currents.

MATT MOTISI, Biochemistry

Joe Vinson, Chemistry

“Quantitation of Total Phenol Antioxidants in Commercial Milk and Chocolate Products”

Increased consumption of chocolate polyphenols has been shown to lower the risk of cardiovascular and all-cause mortality. This is due to the antioxidant character of the chocolate polyphenols. The total amount of phenol antioxidants in various chocolate products was measured, and levels in the samples were compared.

CHRISTOPHER POMBO, Biology

Janice Voltzow, Biology

“Scanning ciliated surfaces: A comparative study of marine gastropod gills”

Most marine gastropods have gills that they use for respiration. Some species also use their gills for suspension feeding. Scanning electron microscopy produces a highly magnified three-dimensional image of surface structures that permit us to study the morphological differences associated with these functions.

ERIN RIPP, Secondary Education/Chemistry

Jennifer Tripp, Chemistry

“Polymer Based Metal Scavengers”

Polymers can be synthesized to act as metal scavengers which are useful in many different areas of chemistry, mainly organic synthesis. These scavengers are very selective and only bind with specific metals. Sulfur complexes such as crown thioethers, have been shown to scavenge metals such as mercury (II). A synthesis of a monolithic metal scavenger was attempted by grafting a thiocrown ether, but synthesis of the required monomer was unsuccessful. In light of this, a new procedure involving solid-phase synthesis of a ligand directly on the monolith was attempted. This new procedure appears successful in preliminary studies. The scavenging ability of this new polymer and regeneration of the scavenger will be tested. This research may have future implications in the purification processes of organic syntheses.

DANIELLE M. RODIER, Occupational Therapy

Carol Reinson, Occupational Therapy

“The Professional Development of Occupational Therapy Practitioners within the Practice Area of Brain Injury”

This Master’s thesis examines the value of professional development activities for occupational therapy practitioners working within the practice area of brain injury. The participants of this study are employed at the most highly-ranked rehabilitation hospitals throughout the nation.

PATRICIA SIMPSON, Occupational Therapy

Carol Reinson, Occupational Therapy

“Families in Transition: An Exploration of the Changing Relationships of Grandparents and Grandchildren”

Discontinuity between formal and informal service providers is creating a barrier to access for families in which grandparents are raising their grandchildren. This qualitative study examined the differences between service provision, and the impact on families who are part of this phenomenon.

LORI SLEDZIEWSKI, Occupational Therapy

Carol Reinson, Occupational Therapy

“Relationship between awareness of ageism, participation in leisure activities, and self-concept in the elderly”

This study investigated the relationship between perceived ageism, leisure participation, and self-concept in the elderly. Results showed that individuals who spend more time participating in activities outside of the home have a greater awareness for ageism. It is evident that a change in societal attitudes towards the elderly is needed.

BRENTT SWETTER, Psychology

Galen Baril, Psychology

“Females Low on ‘Care’ Most Accurately Predict Self Condemnation by Others”

Batson (2002) showed that 80% of his students self-servingly assigned a positive task to themselves and a boring task to another person even though they knew the other person thought the assignment was done by chance. When the students were then questioned about what was “morally right”, 90% said assigning the desirable task randomly or to the other person. Baril (2005) found that that females low on Gilligan’s Care orientation most accurately predicted this surprising self condemnation. The present study was conducted to replicate Baril’s findings with a more representative sample and to investigate factors related to self-reported behavior in the Batson situation reported earlier (Baril & Swetter, 2006).

JUSTIN TUNIS, Biology, and THOMAS LANGAN, Biology/Philosophy

Fr. Timothy Cadigan, S.J., Biology

“Effect of Acid Mine Drainage on Diatom Diversity and Abundance in the Lackawanna River”

The effect of Acid Mine Drainage (AMD) on part of the benthic community (Diatoms) in the Lackawanna River was examined. Diversity, abundance and dominant species were significantly different in a non-polluted reach compared with a reach heavily affected by AMD.

COLLEEN ZANIS, Neuroscience

Christie Karpiak, Psychology

“The Relationship between Wing’s Subgroups in Children with Autism and Parental Stress and Depression”

Parenting a child with autism creates more parental stress than parenting a child with another developmental disability. This project examines whether a child with autism’s social presentation as defined by Wing’s subgroups (aloof, passive, and active-but-odd) differentially affect parental stress and depression.

ORAL PRESENTATIONS

2:30pm to 4:00pm

Casey Conference Room

2:30pm

SUE HEPPLER, English/Philosophy

Michael O’Steen, English/Theatre

“An Insight into the Style of Samuel Beckett”

The presentation will include a brief description of Samuel Beckett’s writing style and what I have learned from directing his short plays Come and Go and Catastrophe. I will also touch on Gianni Vattimo’s philosophy on post-modern art, specifically concerning Beckett.

3:00pm

JASON BRUBAKER, Criminal Justice

James Roberts, Sociology/Criminal Justice

John McInerney, English

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