Welcome to the 22nd Annual Marywood University Graduate Research Forum

Faculty members and Graduate level students of Marywood University were invited to participate in the 22nd Annual Graduate Research Forum. Participation in this poster format program includes both individuals who are voluntarily presenting examples of their scholarship presentations and presentation of required class projects. This booklet contains the abstracts of participants in this year’s forum. Abstracts are alphabetized by first author’s last name.

Marywood University continues its tradition of encouraging the development of scholarship by celebrating the research and application projects that students and faculty have worked on during the past year. Throughout their graduate studies, students have been prepared to develop and test theories by examining current practices within their respective disciplines. Since last year, we have expanded the scope of the forum to include professional contributions as well as experimental approaches to research projects. The Graduate Research Forum is an opportunity for faculty members and students to share their knowledge with both our Marywood community and the larger community.

The Research Forum is the result of close cooperation of many people throughout the University. We would like to thank members of Marywood University’s Maintenance Department, Media Services, Print Shop, and Dining Services. We also extend a special thanks to Kristie Congdon for creating a multimedia accessible program for the forum, Rima Anescavage for assisting with communications and especially Annette Babcanec in the Education Department for her work in helping to prepare this handbook.

We are grateful to Deans Mary Anne Fedrick, Frances Zauhar, Gregory Hunt, Mark Rodgers and Collier Parker for their continued support of this endeavor. We also thank Sister Anne Munley, IHM, Ph.D., Dr. Alan Levine, Vice President for Academic Affairs and Dr. Maria Montoro Edwards, Assistant Vice President of Research, Office of Research and Sponsored Programs who further collaborative scholarship between our faculty and graduate students.

Most importantly we thank the faculty who encourage the spark of scholarship in our students and the students themselves whose intelligence, creativity, and enthusiasm make this event possible.

Christopher Brey, Ph.D., CLAS
Bruce Wisenburn, Ph.D., RCEHD
Michelle Gonzalez, Ph.D., RCEHD
# Table of Contents

*Stigma as a Barrier to Help-Seeking in Lesbian, Gay, and Bisexual Individuals*  
Sarah Africq  
6

*Analyzing Historical G7’s Prices*  
Ali Alhamdan  
7

*Manage The Crisis Before It Happens*  
Bader Al hodithi  
8

*Engaging Creative Connections: An Art Therapy Intervention Pilot Study For Those Living With Dementia*  
Katrina L. Alia, Frank C. Florence, Kaitlin Staples  
9

*Effectiveness of self-management interventions among diabetic patients*  
Harneet Bagga  
10

*The Effectiveness of the Marywood University MSW Curriculum at Promoting NASW Cultural and Political Values*  
Donald C. Barnes, Jr.  
11

*Measuring Working Memory: A Computerized E-Prime Operation Span Task*  
Gemma Boyd  
12

*The Relationship between Exposure to Domestic Violence during Childhood and Adult Revictimization*  
Haley Boyko  
13

*Educational and Reintegration needs of Combat Veterans*  
Kara Capozzi  
14

*Assessing Forecast Accuracy*  
Evelyn Claudio  
15

*Problems Concerning Transportation Logistics*  
Ramon Claudio, Joseph O’Malley, John Little  
16
Health Literacy and Client Empowerment
Melody R. Collins

Is There a Relationship between Gender and Recidivism?
Joseph De Rosa

Traditional and Electronic Bullying Among College Freshmen
Laura Donath

Do Wraparound Service Interventions Impact Behaviors of Children with Emotional and Behavioral Disorders?
Melissa Dutcher

Social Networking: Determining “Ghost” Accounts
Angeline Dwidinata, Kori Grogan, Robert Herie

Relationship Between Education and Household Income and the Outcome of a Parenting Program
Erica Engles

Student Bias and Knowledge of Counseling: Their Impact on Help-seeking Behavior Towards Undergraduate Counseling Services
Ashley Forestal

Exploring the Relationship Between Prescription Opioid Use and Subsequent Heroin Addition Among Adults in a Treatment Setting
Nicole Gibbs

Nutrition Knowledge and Food Selections in College Students
Courtney Grzech

Changes in Child Abuse Prevention Interventions
Jenny Jean-Louis

Is Controlled Frequency Breath Swimming a Surrogate for Respiratory Muscle Training?
Kaleen Lavin
PTSD Treatment among Veterans
Maureen E. Logan

Special Generation Education Teachers’ Attitudes Regarding Use of Wraparound Services (Therapeutic Staff Support or TSS) in the Pennsylvania Classroom
Alisha F. Marmo

The Effects of Ginger Supplementation on Exercise-Induced Muscle Damage
Melissa Matsumura

Characterization of Krüppel-Like Transcription Factor KLF-2 expression level in Caenorhabditis elegans using RT-PCR
Matthew McDonnell

Improved Methods for Single Nucleotide Polymorphism (SNP) Detection
Matthew McDonnell

Self-Efficacy as a Predictor of Leadership Competence
Edward McNichols

Characterization of the Histone Variant Htz1 Involvement in Sister Chromatid Cohesion
Damon Musso

Perceived Symbolic and Realistic Threat: How do they affect Moral Exclusion?
Regina A. Osif

A Data Mining model for Non Fixed Income Securities
Portfolio Optimization in the insurance industry
James Phares

Assertive Community Treatment Programs Seek to Reduce Psychiatric Hospitalizations for Severely Mentally Ill
Janet Price

Spirituality, Religiosity, and Satisfaction with Life as Predictors of Relapse among Alcoholics
Joseph Reichmann
The Differences in Perceptions of Bullying and Its Frequency for Students in Special Education as They Progress through Grade Level
Heather Rogan

The Effectiveness of Social Stories and Video Modeling in Teaching Social Skills to Students with Autism
Jamee L. Ruddy

Marywood University’s MSW Alumni’s Perception of Effectiveness of Field Placement and Job Hunting
Morgan Rulison

Analyzing Stock Prices by Comparison to Dividend Distribution
Richard S. Satyavrata

Are the Perceptions, Fears, Attitudes and Philosophies of General Education Teachers Hindering the Practice of Full Inclusion of Students with Disabilities in the General Education Classroom?
Jennifer Scott

Assessment of Weight Concerned Behavior in Females: A New Measure
Colleen Siti

Cost Saving Techniques for Ground Service Equipment (GSE)
J. Jamal Smiley

The Affects of Implementing a Reading Assistance Dog Program For Struggling Readers
Heather Stanton

People’s Perceptions and Attitudes on Eating Disorders: Anorexia and Bulimia Nervosa
Lauren Tomaszewski
Stigma as a Barrier to Help-Seeking in Lesbian, Gay, and Bisexual Individuals

Sarah Afriecq

Sponsored by: Shamshad Ahmed, Ph.D.

Reap College of Education and Human Development

The purpose of this study is to investigate stigma and attitudes toward professional help seeking in lesbian, gay, and bisexual (LGB) individuals. Participants will be recruited through listservs geared towards LGB individuals. One hundred participants will complete an online survey to assess for social stigma (Stigma Scale for Receiving Psychological Help), self-stigma (Self-Stigma of Seeking Help), and help seeking (Attitudes Toward Help Seeking – Short Form). It is hypothesized that there will be a negative correlation between stigma and help seeking and that LGB individuals who experience more stigma will be less likely to seek help. A multiple regression will be conducted and the results are expected to show a negative correlation between stigma and help seeking in LGB individuals.
Analyzing Historical G7’s Prices

Ali Alhamdan

Sponsored by: Ahmed Gomaa, Ph.D.

College of Liberal Arts and Sciences

This project evaluates a foreign exchange prediction model by analyzing the historical big seven (G7) currency prices on a daily basis for the past 5 years and tests if this model would lead to profit maximization. First, the developed model identifies the prior five days price movement trend, and attempt to find the same trend during the past five years period. The model then uses the result as a cue of whether the price will increase, decrease or stay relatively stable, and the associated level of accuracy in the prediction model.
Manage The Crisis Before It Happens

Bader Alhodithi

Sponsored by: Ahmed Gomaa, Ph.D.

College of Liberal Arts and Sciences

An Oasis in the remote desert area located in the north east of Saudi Arabia near from Saudi- Kuwait Border attracts a lot of visitor in a spring season especially in weekends. The problem is that there is a substation gas pipeline located very near from the Oasis. The project develops an emergency management plan by optimizing the logistics of moving to the crisis place, the logistics for the evacuation plan such as the shortest path between the affected zone and the nearest cities in which the support forces will come. An associated proposal for budget adjustment is provided to the department of Public Safety.
Engaging Creative Connections: An Art Therapy Intervention Pilot Study
For Those Living With Dementia

Katrina L. Alia
Frank C. Florence
Kaitlin Staples

Sponsored by: Barbara Parker-Bell, Ph.D.

Insalaco College of Creative and Performing Arts

This thesis research study highlights art viewing experiences in conjunction with art therapy as a treatment method for those living with dementia. This research is informed and inspired by the Memories in the Making® program designed by La Doris Heinly (2010) which utilizes art viewing experiences in conjunction with art making. The research was also inspired by a similar program at the Museum of Modern Art in New York City, which used art gallery viewing experiences for those living with dementia. The Media Memory Lane Behavioral Checklist and Levels of Engagement Scales (Olsen, Hutchings, & Ehrenkrantz; 2000) were used to record behavioral observations of participants in this study. The Media Memory Lane Behavioral Checklist and Levels of Engagement Scales (Olsen, Hutchings, & Ehrenkrantz; 2000) have been utilized in day facilities to observe the behaviors of those living with dementia as they were provided activity or engagement opportunities. Participants were recruited from a long-term care facility in Northeast Pennsylvania and ranged from 65 to 95 years of age living with mild to moderate dementia. Participants were observed during reminiscence-focused structured activities provided by the facility. Participants were also observed during art viewing and art making experiences implemented by the researchers. During the art viewing experiences four pre-selected images were displayed and discussed. During the art making experiences participants were asked to create artwork using watercolor paint or watercolor pencils. Following each art making experience, participants were given the opportunity to verbalize reflections about their art making and art viewing experiences. The results of the study show an increase in engagement during the art making phase. A repeated measures ANOVA on engagement scores yielded a significant effect for time x condition F(14,56) = 2.84.
Effectiveness of self-management interventions among diabetic patients

Harneet Bagga

Sponsored by: Kimiko Tanaka, Ph.D.

College of Health and Human Services

This study evaluated the effectiveness of self-management interventions like providing support, motivation and monitoring the progress of diabetic patients by utilizing single-subject design. The sample comprised of five participants whose score and active involvement in interventions were recorded for a whole year on which visual analysis was performed. To measure the effectiveness, The Summary of Diabetes Self-Care Activities Questionnaire (SDSC) which assesses the aspects of the diabetes regimen like diet, exercise, blood-glucose testing and foot care was used. Upon visual analysis, it was found that the scores for diet, blood-glucose testing and foot care were increased after the commencement of the intervention whereas slight change was found in the exercise aspect among all participants. The findings supported the effectiveness of diabetes education and interventions in improving patient’s health outcomes.
The Effectiveness of the Marywood University MSW Curriculum at Promoting NASW Cultural and Political Values

Donald C. Barnes, Jr.

Sponsored by: Jinhyun Kim, Ph.D.

College of Health and Human Services

The purpose of this study was to determine if the reported political and multicultural values of students in the MSW program differ significantly from those in the MS/MA Counseling programs at Marywood University. We predicted that based on the differences in two programs curriculum students in the two groups would exhibit a significant difference in their reported values. Graduate students in the MSW (n=46) and Counseling programs (n=3) were administered an online survey that comprised of a political values questionnaire and the California brief multicultural competence scale. The scores on both assessments were compared using an independent t-test. We found that there existed no significant difference between the two groups on either assessment. It appears that the differences in the curriculum in the two programs have no significant impact on the political values or multicultural competency levels of students.
Measuring Working Memory: A Computerized E-Prime Operation Span Task

Gemma L. Boyd

Sponsored by: Edward J. Crawley, Ph.D.

Reap College of Education and Human Development

Working memory (WM) is a multimodal storage system that continuously holds information while it is processed. The present study used a computerized Ospan (via E-Prime, an experimental generator) to gauge WM. The study included 65 young adults enrolled in college. Participants completed 15 trials, with 3 series of 2 - 6 operation word-strings. A manipulation check showed scores for the number of words accurately recalled were positively correlated with the number of correct mathematical equations, $r = 0.22$, $p > .05$. Results found response times for equations were negatively correlated with average accuracy on equations, $r = -.434$, $p = .000$. The task also demonstrated high internal reliability ($\alpha = .82$). Limitations and future implications were discussed.
The Relationship between Exposure to Domestic Violence during Childhood and Adult Revictimization

Haley Boyko

Sponsored by: Lynn Hutchings, Ph.D.

College of Health and Human Services

Between the years 2000 and 2007, at least 1,100 people died as a result of domestic violence across Pennsylvania. In 2011, there were 166 fatalities in Pennsylvania alone from domestic violence. The current study was conducted to explore the relationship between exposure to domestic violence as a child and being revictimized by one or more incidents of domestic violence as an adult. Clients from a domestic violence agency in northeastern Pennsylvania volunteered to participate in this study. A mixed method approach was utilized. A survey was used to collect quantitative data from the participants. Results will help to elucidate the relationship between witnessing or experiencing domestic violence as a child and being revictimized in adulthood. The findings of this study will create awareness and further understanding of the issue and provide information for preventative measures for the future.
Educational and Reintegration needs of Combat Veterans

Kara Capozzi

Sponsored by: Kimiko Tanaka, Ph.D.

College of Health and Human Services

The purpose of this study was to evaluate the needs of combat student veterans in regards to education. Little is known about what services veterans desire upon return as students to post-secondary education. Combat student veterans studying at Marywood University, identified through self-disclosure, are the sample in this study. Data were collected by an online survey distributed by the Marywood University's Department of Military and Veteran Services. Seven combat student veterans responded to this survey. Marywood combat student veterans identified resources, such as a veteran specific office, that they considered important to their academic success and services that they would be more likely to use if provided. It is important to remember that results may be skewed based on the small number of participants in this study and should be taken into consideration in future studies.
Assessing Forecast Accuracy

Evelyn Claudio

Sponsored by: Ahmed Gomaa, Ph.D.

College of Liberal Arts and Sciences

This research will determine the effectiveness of a forecasting method being implemented by a company that sells products to consumers. The first phase involves the data collection which includes actual store pulls, current forecast, and outs (product that stores try to order but is not available in their distribution center). The second phase includes the creation of a new forecast. The third phase involves the forecast accuracy part where the current and the new will be compared and contrasted to determine which one is closer to the actual pulls. Finally, through the usage of charts, I will visualize the result and based on the findings a decision will be made of which forecast will benefit the company the most.
Due to the fluctuating levels of gas prices, it is becoming increasingly difficult for companies to determine overall costs of shipments, given certain transportation routes. Our project demonstrated -through our models via Microsoft Excel- that it will allow both the shipping industries and the manufacturers alike to consistently be able to forecast the best routes for shipping destinations at the most cost-effective price. To forecast the routes and costs, we will use federal averages concerning gas prices along with average fuel consumption per freight truck combined with an in-depth break even analysis to determine profit and the critical path method to determine the most efficient route(s). Following the research there will be an interactive user-interface beta that will allow a mock demonstration using Visual Basic scripting.
Health Literacy and Client Empowerment

Mellody R. Collins

Sponsored by: Jinhyun Kim, Ph.D.

College of Health and Human Services

Enhanced health literacy is presumed to empower clients by ameliorating knowledge deficits that contribute to health disparities; yet few studies address health literacy as a factor in client empowerment. This study examined the relationship between health literacy and client empowerment among patients at a healthcare clinic for the underserved. Data (N=80) analyzed for this study was collected by means of convenience sampling at a free medical clinic in northeastern Pennsylvania and utilized a health literacy scale and the Health Care Empowerment Questionnaire. Correlation analysis indicated that the relationship between health literacy and client empowerment is significant ($r = .287$, $p < .05$), suggesting that empowerment is heightened with greater health literacy. Additional research might explore factors specific to free clinics and social work services that would target health literacy gaps.
Is There a Relationship between Gender and Recidivism?

Joseph De Rosa

Sponsored by: Kimiko Tanaka, Ph.D.

College of Health and Human Services

The purpose of this study was to test the hypothesis that there is a relationship between gender and recidivism among discharged inpatients from a mental health facility. The treatment of mental health patients within hospitals has been well documented in psychiatric research studies, but few studies have looked at the relationship between gender and recidivism. This study reviewed 50 charts of randomly selected patients out of 254 discharged patients from a New York State mental health facility. Data collected from chart review did not suggest that female patients have a higher percentage of recidivism than male patients. Although no significant relationship connecting gender to recidivism was found, future research studies may reveal differing findings by testing the gender and recidivism relationship by other factors that may influence patient recidivism such as DSM-IV diagnosis, ethnic population of the patients and geographic location of the facility.
Traditional and Electronic Bullying Among College Freshmen

Laura Donath

Sponsored by: Kara Medeiros, Ph.D.

Reap College of Education and Human Development

Little research has been conducted on bullying at the college level, although it has been found to have negative effects on those involved. Therefore, this study examined the prevalence of direct and indirect bullying in college freshmen, as well as what methods are most commonly used to commit these acts. The study was completed by 33 college freshmen at Marywood University through an internet survey delivered to their university email account. The results showed that indirect bullying was the most prevalent type and that the most common methods used were traditional. Due to evidence that bullying occurs at the college level and can have severe negative effects on those involved, research should continue to examine bullying within this population.
The purpose of this study was to examine the effectiveness of wraparound service interventions on behaviors of children with emotional and behavioral disorders (EBD) by using a single subject design. Minimal research has examined the effectiveness of these services. Behavior data have been extracted from 5 client charts at Youth Advocate Programs (Y.A.P.) office over a 6 month period during 2012. The data are based on a behavior tally chart designed by Y.A.P. that is used to track and monitor specific behaviors and their frequency, duration, and intensity. A visual analysis indicated that wraparound service interventions do have an impact on the decrease of unwanted behaviors. The findings can be useful for practitioners to understand the relationship between atypically developing children and the necessity of mental health service interventions.
In a technology driven world, companies are engaging themselves in social networking to promote themselves. One issue that has arisen from this business practice is the creation of false users used to sabotage companies. The sabotage consists of false users spamming web content and/or falsely endorsing a product. We have created a model to analyze data on determining whether a social media account is FAKE or NOT. The criteria to determine this will be: network links, stock image for profile picture and content of post. Our analysis produces an understanding of how to distinguish between a real customer profile and a fake profile. This information could benefit the company greatly in determining feedback and reviews of a product or service.
Although there is research that examines factors that inhibit progress in a parenting program, there is very little research examining the relationship between education, finances and the outcome of the parenting program. The purpose of this study was to examine the relationship between education, family income and the outcome of a parenting program. This study examined the charts of 100 randomly selected parents involved in a parenting program in the past three years who participated in the program. Preliminary Chi-square analysis revealed there is no relationship between income, education and the outcome of the parenting program. Some parents choose to stop participation in the program voluntarily; future studies should examine why parents do not complete the parenting program.
Understanding the relationship between student biases and knowledge of available counseling services is important when young adults have the highest rate of mental illness of any age group. The purpose of this study was to describe current Marywood undergraduate students’ demographics, biases, and knowledge of counseling services and to examine the relationship between bias and knowledge. Students (N=72) completed an online survey which consisted of demographic and knowledge of Marywood counseling questions and 4 established scales. Preliminary results appeared to support the researcher hypotheses. A relationship between higher willingness to seek counseling scores and student reports of adequate knowledge of counseling services (P<.001, P<.009) was shown. Also, more respondents reported an adequate knowledge of counseling services (79.2%) than those that did not.
Exploring the Relationship Between Prescription Opioid Use and Subsequent Heroin Addiction Among Adults in a Treatment Setting

Nicole Gibbs

Sponsored by: Lynn Hutchings, Ph.D.

College of Health and Human Services

The purpose of this study was to replicate findings of Peavy et al. (2012) identifying a correlation between the use of prescription pain medication and subsequent heroin addiction. Chart reviews of 39 inpatient and 39 outpatient adult clients at a substance abuse treatment facility were conducted. Seventy-two percent of participants used heroin and eight-three percent of participants used opioid drugs. Twenty-eight percent of participants reported a history of pain management and 38% percent were identified as graduating from opioid use to heroin use; however, no significant relationship was found between opioid use and subsequent heroin dependence. This lack of significance may be attributable to limitations of the study.
Previous research has shown a relationship between nutrition knowledge and dietary intake. The purpose of this study was to examine the relationship between knowledge of the Nutrition Facts Label and food selections in college students, a population with the poorest dietary intake patterns. Participants completed a Nutrition Facts Label quiz to assess nutrition knowledge as well as had pictures taken of their lunch trays on 3 separate days in the cafeteria. Food selections were then compared to national nutrition guidelines. Sixteen participants (9 males, 7 females, 87.5% white/not Hispanic or Latino, mean age of 20.8) completed the study. Results showed that there was no relationship between nutrition knowledge and food selections. The average score on the Nutrition Facts label quiz was 9.94 out of 12 and the average score of the food selection was 7.56 out of 15. In conclusion, these findings are consistent with previous research regarding poor dietary intake by college students as students frequently chose food items high in added sugars and solid fats and did not choose fruits, vegetables, and whole grains.
Changes in Child Abuse Prevention Interventions

Jenny Jean-Louis

Sponsored by: Lynn Hutchings, Ph.D.

College of Health and Human Services

The purpose of the research was to review the available literature about child abuse prevention interventions in order to assess how interventions have changed throughout the past four decades. Identifying changes is important for child welfare professionals depend upon effective interventions to stem abusive situations. 714,200 reports of abuse were made to Child Protective service agencies between Spring 1979 to Spring 1980. In 1993 the rate of physical abuse was an estimated 614,100 and during the 2005-2006 calendar year 476,600 children were victims of physical abuse. Interventions utilized vary in type, duration, frequency, mode of intervention, mode of delivery and the target population. Thirty-two research articles from eleven prominent peer-reviewed journals spanning the years 1970-2010 were selected, reviewed and coded. Key words included child abuse prevention and/or child maltreatment prevention interventions. Selection criteria included articles that addressed a specific intervention, explained how it was utilized, including the duration, frequency, mode of delivery and length of time. The mode of interventions and the content of the interventions that have been used consistently over the past forty years include home visitation, group sessions, improvement of parenting skills, social network, personal functioning parent, family functioning or family context, child health and child development.
Is Controlled Frequency Breath Swimming a Surrogate for Respiratory Muscle Training?

Kaleen Lavin

Sponsored by: Gerald S. Zavorsky, Ph.D.

College of Health and Human Services

Respiratory muscle fatigue can negatively impact performance in trained athletes, but swimming benefits the respiratory system and may reduce susceptibility to fatigue. Limiting breath frequency during swimming further stresses the system through hypercapnia and mechanical loading and may lead to more appreciable improvements in respiratory muscle strength and endurance. This study assesses the effects of controlled-frequency breath (CFB) swimming on lung function. Eighteen subjects (10 male), average (SD) age 25(6) years, BMI 24.4(3.7) kg/m2, underwent preliminary testing to assess pulmonary function, running economy, aerobic capacity, and swimming performance. Subjects were then randomized to either CFB (one or fewer breaths per length) or stroke-matched (SM, one breath per four strokes) condition. Subjects completed twelve training sessions, in which CFB subjects took 2(2) breaths per length and SM subjects took 7(1). At the conclusion of the study, maximum expiratory pressure improved by 11(15)% overall (p<0.05), but max inspiratory pressure was unchanged. Running economy was 6(9)% better in CFB following training (p<0.05). Forced vital capacity increased by 4(4)% in SM (p<0.05) and was unchanged in CFB. The controlled-frequency breathing group improved by 8(5)% in 150-yard freestyle time (p<0.05). These findings suggest that limiting breath frequency may improve muscular oxygen extraction during terrestrial exercise in novice swimmers.
PTSD Treatment among Veterans

Maureen E. Logan

Sponsored by: Lynn Hutchings, Ph.D.

College of Health and Human Services

The purpose of this study is to evaluate the effectiveness of post-traumatic stress disorder (PTSD) treatment among veterans. PTSD is a chronic and disabling psychiatric disorder that may develop following exposure to a traumatic and/or painful incident. Soldiers returning from combat are considered the most at risk population for experiencing distressing events and developing PTSD. This quantitative, descriptive study includes questions from both Horowitz, Wilner & Alvarez (1979) Impact of Life Events Scale and Holmes and Rahe (1963) Life Change Index Scale. Surveys were distributed to 170 veterans living at Delaware Valley Veterans Home in Philadelphia, PA. Variables addressed included the effectiveness of treatment, the branch the participant served under, if they were involved in combat, and if so, for how long. The results of this research will help to elucidate the effectiveness of PTSD treatment among veterans. Although research suggests a decrease in PTSD and symptoms from treatment (medication, talk therapy, group therapy), research confirming and explaining the efficacy of treatment options is needed.
Children suffering from severe emotional and behavioral disorders are one of the most at-risk populations within our schools, often served through comprehensive, community-based services referred to as “wraparound”. Since Pennsylvania has its own state-specific structure for wraparound, there is a lack of current research regarding mental health personnel, specifically TSS workers, within an educational context. The purpose of this study was to identify common attitudes held by special and general education teachers regarding the use of wraparound services within their classrooms and to compare differences in attitudes between the two groups. An attitude survey was created by the researcher and distributed to K-6 special and general educators in 3 school districts within northeastern PA during the spring of 2013. The results did not reveal a significant difference between teacher groups, but several factors contributing to attitudes were identifies and discussed.
Ginger has been attributed as having analgesic and anti-inflammatory properties. As previous research has been unable to determine optimal dosing, this study aimed to determine a beneficial dosage on reducing muscle soreness following a bout of high eccentric exercise. This study investigated whether a 4g ginger supplement, taken once a day for 5 consecutive days, would result in a greater reduction of inflammatory markers compared to those receiving a 4g placebo. Twenty non-weight trained participants performed 4 sets of 10 concentric/eccentric actions at 80% of their 1-RM; and 4 sets of 10 eccentric actions at 100% of their 1-RM. Muscle soreness, arm circumference, range of motion, and skin temperature were assessed prior to and following the exercise. Biomarkers (CK and LDH) and strength assessments were also gathered throughout the study. Repeated-measures analysis of variance (ANOVA) was utilized to analyze the data. Active elbow flexion range of motion was found to have a significant interaction effect (p < 0.001). Supplement appeared to only have an effect for active elbow extension range of motion (p < 0.05). Overall, the findings of this study indicate that consumption of a 4g ginger supplement once a day for 5 days, may allow an initial discomfort from a bout of eccentric exercise. In conclusion, further research should be performed to determine whether a 4g dosage of ginger may be beneficial, as to our knowledge, the current study is the first to investigate this.
Characterization of Krüppel-Like Transcription Factor KLF-2 expression level in Caenorhabditis elegans using RT-PCR

Matthew McDonnell

Sponsored by: Christopher W. Brey, Ph.D.

College of Liberal Arts and Sciences

Krüppel-like transcription factors (KLF) are a family of proteins that are universally involved in all aspects and processes of cell metabolics, and more specifically fat metabolism. Excess fat accumulation can lead to pathological conditions that can be linked to several metabolic diseases in humans. We have previously been able to link Ce-klf-1 and Ce-klf-3 to misregulation of fat metabolism in Caenorhabditis elegans. However, Ce-klf-2 has not been thoroughly studied. To address Ce-klf-2 impact on fat storage we are currently examining Ce-klf-2 expression levels at different developmental stages of C. elegans using RT-PCR. Briefly, eggs were extracted from worms and transferred to NGM plates seeded with OP50 bacteria. The eggs were incubated at 20oC for their appropriate time (synchronization) to isolate the eggs in embryos, L1-L4, and adult stages. Total RNA was then extracted and the mRNA was converted to cDNA. The cDNA was amplified using two different primers specific for the Ce-klf-2. The ama-1 gene was used as the housekeeping gene. The Ct comparative method was used to determine expression levels.
Improved Methods for Single Nucleotide Polymorphism (SNP) Detection

Matthew McDonnell

Sponsored by: Michael C. Kiel, Ph.D.

College of Liberal Arts and Sciences

Single nucleotide polymorphisms (SNPs) are changes in one base pair of the human genome. SNP analysis has become an important part of genome analysis, particularly in studying human diseases. ARMs-Tetra primer method is a common technique to identify alleles of different SNP. It employs four primers that amplify the SNP in a polymerase chain reaction (PCR). Gel electrophoresis follows this method for analysis of results. We propose a method in which Real-Time PCR can be used to detect SNPs, basing the genotype off of a melting curve. We have concluded that this is a more efficient method for SNP analysis and genotyping.
Self-Efficacy as a Predictor of Leadership Competence

Edward McNichols

Sponsored by: Kimiko Tanaka, Ph.D.

College of Health and Human Services

The purpose of this study was to examine the relationship between pre-program data related to self-efficacy and leadership competence outcomes. To accomplish this, a secondary analysis was performed on data collected by Sister's Leadership Development Initiative in the course of evaluation of a leadership development program participated in by 254 African women. This study was conducted owing to a gap in the literature with respect to the characteristics of successful leadership program trainees. A preliminary correlation analysis showed a significant relationship between pre-program self-efficacy and leadership competence outcomes ($r = .319, p = .000$). This information may be useful in leveraging the limited resources available to leadership training programs by identifying a profile of a training candidate with a high likelihood for success.
Characterization of the Histone Variant Htz1
Involvement in Sister Chromatid Cohesion.

Damon Musso

Sponsored by: Lisa Antoniacci, Ph.D.

College of Liberal Arts and Sciences

Histone variants are proteins that exchange with the core histones during the various stages in chromatin remodeling and cell replication. Prior research has provided information on the crucial roles that these proteins play on chromatin structure and dynamics. Htz1 is a histone variant that exchanges with the H2A core histone protein during times of expression that would allow for the inhibition of the spread of gene repression. Most recently Htz1 was identified to physically associate with Mps3 in addition to function in DNA damage repair pathways with Mps3. The repair of damaged DNA depends on sister chromatid cohesion to aid in the repair. Mps3 functions in sister chromatid cohesion along with several of the other physical interactors of Mps3 (Rad24, Elg1, Ctf7, Ctf18). Therefore because of the physical association with Mps3, and its documented role in DNA damage repair, Htz1 is hypothesized to play a role in sister chromatid cohesion.
Perceived Symbolic and Realistic Threat: How do they affect Moral Exclusion?

Regina A. Osif

Sponsored by: Dana C. Leighton, Ph.D.

Reap College of Education & Human Development

Both realistic threat and symbolic threat have been theorized to result in moral exclusion, or the removal of the threatening group from the scope of moral concern. The present study tested whether experimentally induced symbolic and/or realistic threats from an outgroup cause increased moral exclusion. As expected, moral exclusion was greater when either realistic threat or symbolic threat were present compared to when these threats were absent. Potential moderators include social dominance orientation (SDO) for realistic threat, and right-wing authoritarianism (RWA) for symbolic threat. SDO was not a significant moderator of realistic threat, but RWA moderated the effect of symbolic threat. Our results showed that realistic and symbolic threats perceived from an immigrant outgroup are predictors of moral exclusion.
A Data Mining model for Non Fixed Income Securities
Portfolio Optimization in the insurance industry

James Phares

Sponsored by: Ahmed Gomaa, Ph.D.

College of Liberal Arts and Sciences

The main objective of this research is to increase returns and maintain gains during an
economic downturn, by minimizing risk exposure. In addition, attempt to predict with a level of
certainty where the market will shift based on health insurers of similar size in both the local as
well as national forums. The scope of the project will be to compare Hospital Services
Association of Northeastern Pennsylvania’s (D/B/A Blue Cross of Northeastern Pennsylvania -
BCNEPA) equity portfolio against itself and other plans in the state. This will be the best
representation of the constraints placed on insurances plan by the State of Pennsylvania as well
as the BCBSA. A number of data mining models will be tested including Naïve Bayes, Neural
Networking, decision trees, linear regression, and Association rules.
Assertive Community Treatment Programs Seek to Reduce Psychiatric Hospitalizations for Severely Mentally Ill

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This researcher sought to determine whether Assertive Community Treatment (ACT) program participation was effective at reducing psychiatric hospitalizations. Forty-four convenient sampling participants were selected for this study. Study participants were selected from a specific ACT program located in North Eastern Pennsylvania. A paired–samples t-test was calculated comparing the means of pre and post treatment resulting in the following, pre treatment was 2.98 hospitalizations (sd= 1.95), and the mean on the post treatment was 0.91 hospitalizations (sd = 1.51). Researchers hypothesis was supported and a significant decrease in hospitalizations is noted (t(43) = 6.03, p< .05)). The implications of this study for the field of Social Work can be to offer least restrictive models of treatment that have been proven to be effective at reducing psychiatric hospitalizations.
Twelve-step programs assert that alcohol misuse is associated with problems in spiritual functioning (Saunders, Lucas, & Kuras, 2007). As such, the purpose of the current study was to examine the relationship among relapse, spirituality, religious commitment, and satisfaction with life. Alcoholics from Clearbrooks’ Aftercare and open AA meetings (N=117) were surveyed. A multiple regression found that satisfaction with life and spirituality accounted for 35.2% of the variance of warning of relapse (F (3,113) = 59.07, p < .001). However, there was not a significant relationship between warning of relapse and religious commitment. It appears that for the current sample of alcoholics, spirituality is an important component to preventing relapse. Consequently, psychologists might consider incorporating spirituality and improving satisfaction with life into treatment of alcoholics. Future researchers should examine warning of alcohol relapse, satisfaction with life, and spirituality using a longitudinal design to better understand the causality of these relationships.
The Differences in Perceptions of Bullying and Its Frequency for Students in Special Education as They Progress through Grade Level

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This study showed whether special education students were being bullied and if so why, how often it occurred, what forms of bullying were most common, and the proportion of students bullied in each grade. The sample consisted of students in grades four, five, six, seven, eight, and nine in a public school district. Within grades four through six, there were learning support classrooms that students attend for reading and/or math instruction; grades seven through nine were in a fully inclusive setting. All students participating in the study had active Individualized Education Programs. The frequency of bullying among special education students in each grade was examined as well as how bullying is perceived among those involved. To do this, a survey based on a publication from the National Center for Injury Prevention and Control of the Centers for Disease Control and Prevention titled Measuring Bullying Victimization, Perpetration, and Bystander Experiences: A Compendium of Assessment Tools, was created and utilized in order to obtain the information needed. A pre survey was given to all participants and was followed by a lesson on bullying. Two weeks later, a post survey was then given to all participants. The data obtained did not show a significant increase of the frequency of bullying through higher grade levels. However, the post survey did reveal that students’ perception of bullying and its frequency was shown to change as a result of the implementation of the lesson. Collection of these data can be used to aid in the development of various prevention techniques, which when implemented in classrooms, may help reduce the amount of bullying.
The Effectiveness of Social Stories and Video Modeling in Teaching Social Skills to Students with Autism

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The study examined the effectiveness of social stories and video modeling in increasing positive social behaviors and decreasing negative social behaviors among students with Autism. A social story is a written, illustrated short story that displays positive social skills while video modeling has a similar purpose but displays it in a video format often through a skit, play or hypothetical situation. The first phase of the study involved observing students to obtain the frequencies of particular behaviors. The second or intervention phase included teaching lessons using both social stories and video modeling. The third phase involved observing hours of the participating students to identify any changes in positive and negative social behaviors. By identifying an increase in positive social behaviors and a decrease in negative social behaviors, we can come to the conclusion that the use of social stories and video modeling has the potential to bolster positive social skills in students with Autism.
Marywood University’s MSW Alumni’s Perception of Effectiveness of Field Placement and Job Hunting

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This study of 40 Marywood University Masters of Social Work (MSW) alumni who have graduated within the past seven years explores their perception of effectiveness of field placement and job hunting. As of 2012, little is known about this topic. The School of Social Work distributed an 18 question online survey to all participants. The study found that alumni perceive field placement to be useful in gaining experience, developing important skills, and beneficial to finding a job. In conclusion, this study shows that field placement is helpful to Marywood students in their job search post graduate school. This descriptive study can be an indicator of effectiveness of Marywood’s MSW program.
Analyzing Stock Prices by Comparison to Dividend Distribution

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This research aims to analyze the trend of stocks, including any change in its prices and dividend yields in order to effectively choose stocks that assure a dividend capture with a high rate of probability. As most companies pay their dividends quarterly, the goal is to strategically position oneself to pick stocks with a high chance of predictability. Thereby the analysis will include a trend analysis and a forecasting model to predict the path of a stock and to do it effectively, thus creating an effective tool for earning short term profits successfully, while taking calculated risks. The analysis will be surrounded around financial data listed in the S&P 500 index.
Are the Perceptions, Fears, Attitudes and Philosophies of General Education Teachers Hindering the Practice of Full Inclusion of Students with Disabilities in the General Education Classroom?

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Research indicates that our public schools are struggling to successfully integrate students with disabilities into general education classrooms (Santoli, Sachs, Romey & McClurg, 2008; Fuchs, 2009-2010; Kaianowski-Press, Foote & Rinaldo, 2010). Research cites one of the dominating reasons for this failure to integrate these students successfully are the attitudes of the school administration and regular education teachers with regard to the practice of full inclusion (Bui, Quirk, Almazan, & Valenti, 2010; McLeskey, Waldron & Redd, 2012). The purpose of this research was to investigate how one urban high school in the north east region of Pennsylvania manages the practice of inclusion in their school. The study consisted of 30 general education teachers taking a survey that examined their perceptions, attitudes and philosophies on the current model of inclusion. A majority of the participants indicated that they accepted inclusion as an educational practice and felt it is a positive advancement in education. The participants did however take issue with all students with disabilities being included in their regular education classes for a few specific reasons. For instance, participants felt that they were not fully supported by their principal, they did not feel qualified to teach or handle negative behaviors of these students, and they lacked confidence in their ability to instruct these diverse learners.
Assessment of Weight Concerned Behavior in Females: A New Measure

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The Weight-Concerned Eating Behaviors Scale (WCEBS) is a 52-item self-report scale that assesses behaviors related to weight concern. The WCEBS was designed to assess degree of weight concern in a sub-clinical population. The items on the scale describe females taking part in specific behaviors relating to food. This study examined the reliability of a revised version of the WCEBS and found this reliability to be identical to what was observed with the original edition (coefficient alpha = .96). Convergent validity for the WCEBS was established by correlations with measures of eating disordered attitudes (the Eating Attitudes Test-26, EAT-26), body dissatisfaction (the Figural Ratings Scale), and self-esteem (the Multidimensional Self-Esteem Inventory, MSEI). Participants were 317 college females. WCEBS scores correlated positively with the EAT-26 [r (315) = .76, p < .001] and body dissatisfaction [r (315) = .41, p < .001] and negatively with body appearance [r (315) = -.45, p < .001], and body functioning self-esteem on the MSEI [r (318) = -.30, p < .001]. Controlling for social desirability did not alter the validities observed. Two 26-item short-forms of the WCEBS were also developed. The reliability for each short-form was 0.92 and the two short forms showed a strong positive correlation with one another [r (315) = 0.94, p < .001]. The paper ends with a consideration of future development of the WCEBS for clinical and research applications.
Cost Saving Techniques for Ground Service Equipment (GSE)

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The project objective is to identify, track and rank practices to save money spent on fuel by eliminating unnecessary idling of Ground Service Equipment (GSE) in the airport environment. This research was performed by tracking the amount of saving in fuel consumption during a trial period of a month by enacting these practices. There was a decrease in the expense for fuel in that month. In addition, the author found that by enacting these measures, there is a potential to increase the life cycle usage of the GSE which in turn saves the airline money on replacing equipment and routine maintenance.
The Affects of Implementing a Reading Assistance Dog Program for Struggling Readers

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As students continue to struggle to read, teachers are left with the task to develop supplemental strategies to reach these students. The reading assistance dog program was developed as a supplemental instructional strategy to motivate struggling readers. This study determined the effects of a reading assistance dog program for students enrolled in Title I reading programs or Special Education programs. The participants were in second, third, and fourth grade and were recruited for the study through a recruitment flyer. This study took place at a local community library. The participants attended one (1) twenty-thirty minute session a week for six weeks at the library. During the session they were asked to read a selected book to the therapy dog and handler team. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was utilized as a pre, middle, and post assessment to assess reading comprehension and fluency levels. Out of the seven participants, one student showed an increase in both reading fluency and comprehension based on the results of the DIBELS assessment. Three students showed an increase in reading comprehension or fluency levels. This study was limited by the lack of consistent attendance of the participants, holidays, and the time of day the sessions took place. The results of this study suggest that the reading assistance dog program can positively affect reading comprehension and/or fluency levels of struggling readers, however, more research needs to be conducted in this area.
Anorexia and Bulimia nervosa are two types of eating disorders that can cause physical and emotional impairment to those it affects. Past studies have shown that there are stigmas associated with eating disorders that impede individuals from seeking treatment. This study was conducted to discern what types of perceptions the general public has surrounding anorexia nervosa and bulimia nervosa, and to see if one type of eating disorder is more negatively perceived than another. A quantitative, approach was used with a convenience sample of respondents from surveymonkey.com services (N =153). Respondents answered a series of internet survey questions regarding two fictional scenarios: one describing an individual with anorexia, and the other, an individual with bulimia. Results explored the public perceptions of anorexia and bulimia and shed light on peoples’ perceptions of these two eating disorders. A t-test was conducted with the result being significant (p<.05). The respondents reported more concerns with the fictional scenario of anorexia, rather than the fictional scenario of bulimia.