

The image features a large, dark silhouette of a palm tree on the left side, with its fronds extending towards the center. In the background, there are smaller silhouettes of palm trees and a landscape under a light sky. The text is overlaid on the bottom right of the image.

**Stanford Undergraduate
Psychology Conference 2006**



STANFORD UNIVERSITY
DEPARTMENT OF PSYCHOLOGY

Jordan Hall, Bldg. 420
Stanford, California 94305-2130

May 13, 2006

Greetings,

I am delighted to welcome you to Stanford University and to the Sixth Annual Stanford Undergraduate Psychology Conference. We in the Psychology Department take great pride in this conference series. Started by our undergraduate majors in 2001, it quickly became a tradition and now includes undergraduates nationwide.

Research is the foundation of psychology, and scientific progress is not made in isolation. Generating ideas, formulating hypotheses, and gathering data represent the first steps in a longer process. The next steps involve interacting with the larger community of scientists. Findings are presented to others, criticized, often modified, and then integrated into a body of evidence that continually grows and becomes increasingly refined. This conference has become part of that process by allowing young researchers both to present their work and to discuss ideas with other students who are pursuing similar goals.

The success of the Stanford Undergraduate Psychology Conference this year is due to the extraordinary efforts of members of the Stanford Undergraduate Psychology Association and the Stanford Chapter of Psi Chi. I want to recognize Carolina Gutiérrez, the Executive Director of the conference, for her tireless efforts, as well as the Associate Directors, Cliff Baum, Christina Branom, Eva Chen, Stephanie Kujawski, Meenal Kumar, Katie Lingras, Felicity Miao, Silvia Samanez, Alice Ann Spurgin, and Cindy Wang.

Thanks also go to students who reviewed more than 130 abstracts that were submitted to the conference: Jamila Amarshi, Tessa Cabello, Matt Estrada, Joanna Han, Nick Hollon, Christine Huls, Shari Ilsen, Jessica Laughlin, Kat Lee, Jeanette Mellinger, Rachel Nass, Ayla Nereo, Mike Reding, Jen Schreifels, Katie Smartt, Tina Torrance, and Joakim Vinberg.

My colleagues and I welcome all of you and wish you a stimulating and productive day.

Sincerely,

A handwritten signature in cursive script, appearing to read "Laura L. Carstensen".

Laura L. Carstensen
Professor and Chair



STANFORD UNIVERSITY
DEPARTMENT OF PSYCHOLOGY

Jordan Hall, Bldg. 420
Stanford, California 94305-2130

May 13, 2006

Dear Presenters, Faculty, and Guests,

I am pleased to greet and welcome all of you to the Sixth Annual Stanford Undergraduate Psychology Conference (SUPC). I would like to thank you for coming to Stanford today to share your interest in a field that is becoming more and more influential in areas such as education, public policy, and all fields of research. I look forward to watching numerous oral presentations as well as listening to explanations about the poster presentations, and am mainly excited to learn more about psychology and current research trends from everyone here today, as I hope you are.

One of the major goals of this year's conference was to make the surrounding student population a larger part of the event. To that end, we have invited high school students from three local high schools to attend the conference, and we hope that this experience will inspire and motivate them to pursue their own questions about psychology in their future careers. This year was also a record-breaking one for abstract submissions – although the decisions were very difficult to make, we narrowed down over 130 projects to around 100, making this year the most competitive yet. I feel extremely honored to share with you today the top undergraduate research in the nation, as well as the result of a year's planning and efforts from a highly-motivated group of Stanford students – this year's wonderful group of directors.

Aside from attending the presentations today, we hope that you take this opportunity to meet and interact with other student presenters, some of whom have travelled many miles to be here. We also hope that you have the chance to talk to our distinguished faculty here in the Department of Psychology at Stanford University. In addition to your personal enrichment, your participation here today will help benefit a California high school psychology program. South San Francisco High School will be receiving a grant from SUPC to support the continuation of educational programs related to psychology.

Again, thank you for coming to our conference, and we hope that your experience at SUPC will be a positive impact on your continued academic curiosity.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Carolina Gutiérrez".

Carolina Gutiérrez
2006 SUPC Executive Director

CONFERENCE SCHEDULE

8:00-8:45

Registration	Front of Jordan Hall
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9:00-9:15

Introductory Address	420-040
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9:30-11:00

Paper Session I	380-380C, W, X, Y
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11:00-12:00

Poster Session I	Math and Linguistic Courtyards
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12:15-1:15

Lunch	Oval Ears Biological Sciences
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1:30-2:30

Keynote Address by Carol Dweck	420-040
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2:45-4:15

Paper Session II	380-380C, W, X, Y
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4:15-5:15

Poster Session II	Math and Linguistic Courtyards
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5:30-6:30

Grad School Talk by Prof Boroditsky	380- 380C
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6:30-7:30

Closing / Social	420-050
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8:00-8:45	Registration	Front of Jordan Hall
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9:00-9:15	Introductory Address	420-040
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Introductory Address

Carolina Gutiérrez, Executive Director of the Sixth Annual Stanford Undergraduate Psychology Conference

9:30-11:00	Paper Session I	380-380C, W, X, Y
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Social Psychology I 380-380C

The Role of Felt Security in Promoting Pro-Relationship Behavior

Chauntel Wiggins & L. Jaremka
University of California, Santa Barbara

Mental Mismatch: The Challenge of Predicting Future Feelings

Charlene Wu & Matthew Lieberman
University of California, Los Angeles

Parental and Peer Influence on Religiosity in College Age Students

Adrienne Moe, Erin Walrath, Stephanie Pashby, & Rachel Ward
Seattle Pacific University

The Effect of Financial and Emotional Situations on Male and Female Risk-taking Behavior

Mira Krivoshey
Barnard College, Columbia University

Clinical Psychology I 380-380W

An Analysis of Risk Factors for Disordered Eating among Female Collegiate Athletes

Christina Branom
Stanford University

Dissociation and Distortion: Functional and Effective Similarities

Cristen McLean, Bridget Klest, & Jennifer Freyd
University of Oregon

Distressed and Depressed: Low Distress Tolerance in Depression

Kathryn M. Fischer & Christopher G. Beevers
University of Texas, Austin

Association between Mindfulness and Psychological Distress in a Sample of HIV+ Individuals

Sharone Weltfreid, David Creswell, & Hector Myers
University of California, Los Angeles

Personality Psychology 380-380X

Regional Variation in the United States: Self, Identity, and Agency

Scott Thompson & Hazel Markus
Stanford University

What Does Happiness Mean? Development of Affect Valuation in Preschool Children

Eva E. Chen, Jenny Y. Louie, & Jeanne L. Tsai
Stanford University

Temperament and Strategies of Activational and Inhibitory Control

Laura Johnson, Jessica Kieras, & Mary Rothbart
University of Oregon

Affective Ambiguity Resolution in Girls At-Risk for Depression

Silvia P. Samanez, Karen Dearing, & Ian H. Gotlib
Stanford University

Developmental Psychology I 380-380Y

Attention and Theory of Mind in Preschool Children

Katherine Smartt & Natasha Kirkham
Stanford University

Female Firefighters and Boys with Barbies: An Empirical Study of Gender Stereotypes in Preschoolers

Dana D. Pitts & Rebecca S. Bigler
University of Texas, Austin

'Do You Have Any Advice for Me?' Predicting Four-Year-Olds' Abilities to Give Advice to Peers in Social Situations

Katherine A. Lingras & Carol Dweck
Stanford University

Acculturation Status and Related-Processes: What Ethnic Labels Reveal for Latino Early and Late Adolescents/Emerging Adults

Sherry C. Wang
Smith College

11:00-12:00	Poster Session I	Courtyards
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Math Courtyard

Pathways to Suicidal Ideation: Examining Parental Perfectionism and Emotion Regulation

Blair Kleiber, Ursula Whiteside, & Mary E. Larimer
University of Washington

Developmental Changes in Separations and Activity of Wild Bottlenose Dolphin Calves (*Tursiops*, sp.)

Colleen Barry & Janet Mann
Georgetown University

Children's Responses to Gender-based Inequalities

Virginia L. Borges, Kristina R. Olson, Elizabeth S. Spelke, & Mahzarin R. Banaji
Harvard University

Body Esteem and Ethnicity

Clarissa Nicole Wang
Wellesley College

The role of the Caudomedial Nidopallium (NCM) in Social Recognition in Wild-type zebra finches (*Taeniopygia guttata*)

M. Tomaszycski, S.K. Blaine, T.J. DeVoogd, & E. Adkins-Regan
Cornell University

Baby Sign and Sounds

JaNay Brown, Emily Thom & Catherine Sandhofer
University of California, Los Angeles

Neural Correlates and Functional Connectivity Associated with Self-Referential and Close Other-Referential Processing

Nick Garber Hollon, Rebecca D. Ray, Jeff C. Cooper, Amy L. Shelton, James J. Gross, & John D.E. Gabrieli
Stanford University

Dose-dependent Effects of Alcohol on Memory Judgments

Daniel Camarillo & Mark Van Selst
San Jose State University

The Relation of Self-Concept Clarity and Accuracy: Implications for Relationships Quality

Natalie Nardone & Gary W. Lewandowski Jr.
Monmouth University

You Don't Always Choose What You Like: Differing Predictors of Choice in Indian and European American Contexts

Nina Qi
Stanford University

Affect and the P300 Event-Related Brain Potential

Bella Rozenkrants & John Polich
University of California, San Diego

Parenting in Inner-City Neighborhoods: Relating Gender, Monitoring, and Psychological Outcomes

Lindsey Varvil-Weld
University of Michigan, Ann Arbor

Through the Objectification Glass: the effects of self-objectification on math and verbal test-taking performance

Sasha Lubomirsky
Stanford University

Gay and Lesbian Expectations of Interactions with Heterosexuals

Elizabeth Eccleston, Christina Natale, Sabrina Cox & Adam Fingerhut
University of California, Los Angeles

Relations between Family of Origin Emotionality and Marital Quality: Effects on Parenting Stress and Parent-Child Relationships

Ana Ramirez
Arizona State University

Effects of HIV Status-Related Source of Stress as Predictors of Psychiatric Disorders

Kenn K. Vu & Hector F. Myers
University of California, Los Angeles

The Effect of Attitudes and Social Accountability on Littering Behavior

Stephanie Malin, Jason Lahti, Lori Sakikabara, Shelley Shaver, & Anna Tormey
Seattle Pacific University

Emergence of the “Mutual Exclusivity” Strategy for Interpreting Novel Words: A Longitudinal Study of Online Processing from 14 to 18 Months

Jessica Laughlin, Andrew Rogers, Renate Zangl, & Anne Fernald
Stanford University

Relations between Phoneme Awareness and Letter Knowledge in At-Risk Kindergarteners

Vanessa Loaiza-Kois & Judith Foy
Loyola Marymount University

Aqila Blakey, Margaret Mahoney, Alysha Thompson, Jessica Boyle, & Judith G. Foy
Loyola Marymount University

Expressive Vocabulary and Phoneme Awareness Development in At-Risk Kindergarteners during an Early Reading Intervention

Pamela Mock, Taryn Livingston, & Judith Foy
Loyola Marymount University

Stereotype Threat in Men: Effects of Male Stereotypes in Advertisements

Randi Garcia, Kimberley Kahn, & Paul Davies
University of California, Los Angeles

Causal Learning from Biased Sequences

David Danks & Samantha Schwartz
Carnegie Mellon University

Whatever You Say: How Authority Figures’ Beliefs about Intelligence Affect Our Behavior

Jocelyn Ross
Stanford University

Investigating the Neural Components of Disgust

Rachel Nass
Stanford University

Encouraging Our Youth: The Effect Encouragement has on the Academic Performance of Ethnic Minorities

Salvador R. Vazquez & Christia Spears Brown
University of California, Los Angeles

Peer Stress and Risk for Depression in a Sample of Adolescent Girls

Joanna Han
Stanford University

Perceptions of the Student-Teacher Relationship and Children’s Academic Outcomes

Jennifer Ly & Christia Spears Brown
University of California, Los Angeles

Linguistics Courtyard

Early Reading Intervention for At-Risk Kindergarteners: Print Concepts and Attention

Regional Distribution and Behavioral Correlates of Serotonin 5-HT_{2A} Receptors in Alzheimer's Disease: a Constant Infusion Study With [18F]Deuteroaltanserin and PET
Lekshmi Santhosh
Yale University

The Effects of Praise on Children's Implicit Theories
Holly-Marie Arce, Andrei Cimpian, Ellen Markman, & Carol Dweck
Stanford University

Adolescents' Perceptions of Discrimination
Jessica Cundiff
University of Texas, Austin

"2K KIDS", A Pilot Study: Exploring the Effects of a Computer Intervention Program on Preschool Children's Phonological Awareness
Alexandra Thurston
Scripps College

Sexual Orientation as a Predictor of Risky Sexual Behavior in African-American Men
Corina Lopez & Hector F. Myers
University of California, Los Angeles

Investigation of Olfactory and Neuropsychological Functioning in Children With Sleep Disordered Breathing
N. Herrera, M. Patel, A. Sandford, A. Magit, T. Davidson, P.E. Gilbert, & C. Murphy
San Diego State University

The Effect of Visual Imagery on Healing in Various Injuries and Illnesses
Mallory Taylor & Vaibhav Saria
University of Arizona

Comparison of Different Durations of Chronic Stress on Hippocampal Function and Morphology in the Male Rat
J. Gomez, K. J. McLaughlin, S. E. Baran, & C. D. Conrad
Arizona State University

Self/Other Overlap with God
Carissa Sharp
University of Oregon

The Sharing of Codes between Actions Stored in Memory and Actions Requiring Immediate Execution
Ryan McMeans, Lisa Fournier, & Matthew Wiediger
Washington State University

Color Perception and Preference
Anna Deng & Bonnie Streff
University of Arizona

12:15-1:15	Lunch	Oval Ears Biological Sciences
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1:30-2:30	Keynote Address	420-040
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Carol Dweck, Ph.D.
Stanford University

2:45-4:15	Paper Session II	380-380C, W, X, Y
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Developmental Psychology II	380-380C
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Children's Use of Storybook Context to Determine the Reality Status of Novel Entities
Rachel Riskind & Jacqueline Woolley
University of Texas, Austin

Pomegranate Juice: Can Its Antioxidant Properties Reduce Fetal Alcohol Effects?
Bradley R. Monk, David N. Linsenbardt, Nancy N. H. McGough, Hector D. Dominguez, & Jennifer D. Thomas
San Diego State University

Impulsivity and Language Production: The Relationship between Language and Cognition
Carl L. Dambkowski & Natasha Z. Kirkham
Stanford University

Perceived Knowledge of Family Narratives as a Moderator of Physiological Stress Response to Media Coverage of 9/11

Tage Rai & Marshall Duke
Emory University

Clinical Psychology II 380-380W

Attentional and Neural Correlates of Dieting in Adolescent Girls

Keely A. Muscatell, Eric Stice, & Yalçın Abdullaev
University of Oregon

Sex Differences in Autonomic Correlates of Conduct Disorder and Oppositional Defiant Disorder in Middle Childhood

James Hong
University of Washington

The Role of Student Perception of Teachers on Academic Self-Concept

Betsaida LeBron-Merino
California State University, Chico

Social Psychology II 380-380X

Ethnicity and Gender in the Face of a Terrorist Attack: A National Longitudinal Study of Immediate Responses and Outcomes Two Years after September 11

Thai Q. Chu, Whitney Ence, Mark Seery, Alison Holman, & Roxane Cohen Silver
University of California, Irvine

Juror Decision Making: The Effects of Defendant Race, Aggression Levels, and Self-Esteem on Decisions of Punishment

Ny Thi Tran & Amy Hackney-Hansen
Georgia Southern University

The Role of Positive Emotions in Close Relationships

Sara Algoe, Karla Luttmann-Lopez & Arpine Hovasapian
University of California, Los Angeles

Cognitive Psychology 380-380Y

Investigating the Role of Various Components of Working Memory in Multiple Object Tracking

Rachna Mutreja & Lana Trick
University of Guelph, Ontario

Maximizing Children's Participation: A Study of Reward as Motivation

Jamila Amarshi
Stanford University

Face and Object Recognition Abilities in Patients with Pure Alexia

Stephanie N. Manchin
Carnegie Mellon University

The Impacts of Shareability and Affective Context on Memory

Michelle Baldwin, Lisa DeMarni Cromer, & Jennifer Freyd
University of Oregon

4:15-5:15 Poster Session II Courtyards

Math Courtyard

Facultative Causal Reasoning in Rats

Aaron P. Blaisdell, Kenneth J. Leising, & Jared Wong
University of California, Los Angeles

Narcissism and Boredom Correlation: Effects on the Self and Social Interaction

John Knorek & Sanjay Srivastava
University of Oregon

Does Exercising With Others Enhance the Psychological Benefits of Aerobic Exercise for Women?

Carrie Brecht, Jessica Carrow, Carissa Gores, & Anne Imbs
Santa Clara University

Sex and Species Differences in Delayed Condition Taste Aversion Learning in Rodents

Amy Amira, Jessica Boyle, Riana Chagoury, Gregory Corry, Kenneth Fujii, Julian Gallegos, Ashley George, Taryn Livingston, Jennifer Nam, Rachelle Reeder, Jonathan Roschke, Alysha Thompson, & Michael Foy
Loyola Marymount University

Meditation and the Expression of Compassion toward Prisoners

Katherine Lee
Stanford University

Trace Fear Conditioning and the Estrus Cycle

Sarah Madsen & Jesse Cushman
University of California, Los Angeles

Restraint Stress Blocks Accelerating Effects of Social Cues of Reentrainment in *Octodon Degus*

Rebecca Lane
University of Michigan, Ann Arbor

The Role of Social Relationships in Mediating the Stree-Health Link

Tina Dharmapanij & Jeanette Valentine
Seattle University

Psychological and Social Correlates of Drinking Games Participation in Female College Athletes

Amy Constantine & Byron L. Zamboanga
Smith College

Gratitude Experiences across the Life Span

Anjali Mishra & Todd B. Kashdan
George Mason University

Beating the Odds: What Factors Lead to the Academic Success of Students in Low-Income, Urban High Schools?

Samantha Hallman
University of Michigan, Ann Arbor

Effects of Visual Distracters on Facial Recognition in Children with Autism

Desiree Wilkinson & A. Rebecca Neal
University of Texas, Austin

Narcissism, Self-Construal, Field-Dependence-Independence, and Boundaries of the Self

Tyler Grove, Sara Konrath, & Brad Bushman
University of Michigan, Ann Arbor

Probabilistic Reasoning in Preschoolers: Random Samples and Base Rates

Stephanie Denison & Fei Xu
University of British Columbia

Motivational Links Among Implicit Theories, Goal Orientation, Lay Dispositionism, and Social Comparison

Michael Chladek & Ronald S. Friedman
University of Missouri-Columbia

Sibling Closeness in Twins and Siblings

Mie Fukuda, Denise King, & Shirley McGuire
University of San Francisco

Linguistics Courtyard

The Development of Altruistic Preference: A Cross-Cultural Study

Andrew G. Shipley & William T. Harbaugh
University of Oregon

Effects of Religious Community on Perceptions of Adulthood

Sandra Palo, Kristen Rustia, Sarah Wheatley, & Emily Young
Seattle Pacific University

Does Letter-case Invariance Emerge with Development? An Examination of Pseudoword Priming in 7-22 Year-Olds

Rijuta Pandav, Nancy W. Lin, Sharon A. Ho, & Elyse L. Aurbach
Rice University

The Links Between Self-Esteem and Risky Sexual Behavior Following a Blow or a Boost to One's Feelings of Self Worth

Julia Shlyankevich & Jonathon D. Brown
University of Washington

It's All Relative: Can Relationship Experience Change the Shape of Depression-Related Behaviors?

Rashmi Singh, Marina Berns Kahana, & Daniel Stokols
University of California, Irvine

Gender Differences in Spatial Memory of a Large-Scale Environment

Ann Ekechukwu
Vanderbilt University

Genetic Disease Diagnosis, Communication, and Relationship Satisfaction

Brittany Tinker
Seattle University

Recruitment Methodologies: Participation Rates in Research on Sexual Assault

Samantha Abeling
California State University, Long Beach

Associations between Distress and Disease Progression in a Sample of HIV+ Adults

Hugo Santacruz
University of California, Los Angeles

Emotion Facilitates Forgetting: Retrieval Induced Forgetting of Negatively Valenced Emotional Words and a Selective Mechanism Involved in Memory Suppression

Matthew Estrada
Stanford University

Gender-Specific Effects of Prenatal Cocaine Exposure on 5-HT2A Receptors in Adult Rats

Thomas Lycan
University of North Carolina, Chapel Hill

Immigration and National Identity

Robert Millie
Yale University

Effects of Choice Options on the Behavior in Preschool Students

Jessi Ray & Jennifer Austin
California State University, Fresno

Drinking Expectancies and Heavy Alcohol Use in Female College Athletes: A One-Year Longitudinal Investigation

Barrett Phillips, Talia Williams, & Byron L. Zamboanga
Smith College

The Relationship between Humanistic Validation and Group Cohesion, Belongingness, and Commitment in Student Clubs

Rex Dulay
Seattle University

Gender Differences in the Effects of Social Context on Emotional Responding

Yulia Chentsova-Dutton & Cheryl Hahn
Colby College

Why Can't We All Agree? Personal Template Differences as an Explanation for Inter-Rater Disagreement

Michael Reding
Stanford University

5:30-6:30	Grad School Talk	380-380C
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Lera Boroditsky, Ph.D.
Stanford University

6:30-7:30	Closing / Social	420-050
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Paper Session I Abstracts

Social Psychology I (380-380C)

THE ROLE OF FELT SECURITY IN PROMOTING PRO-RELATIONSHIP BEHAVIOR

Chauntel Wiggins & L. Jaremka
University of California, Santa Barbara

A growing body of research suggests that individuals who feel chronically insecure in their relationships – who doubt their partner's love and commitment – are less willing to engage in behaviors that promote and protect relationship functioning. For example, relative to secure individuals, insecure individuals engage in less adaptive conflict resolution tactics and are less willing to forgive their partner for transgressions. One reason for these outcomes may be that insecure individuals are hesitant to risk investing too much in a relationship that is likely to fail, or in a partner who is likely to abandon them. This reasoning suggests that if insecure individuals could be made to feel more secure in their partner's love and commitment, they would be more willing to engage in pro-relationship behaviors. To test this hypothesis, we conducted an experiment in which we used a subliminal priming procedure to temporarily enhance feelings of security. Specifically, secure and insecure participants were presented with their partner's name paired with either security priming words (e.g., loving, caring) or neutral words. We then assessed a variety of pro-relationship behaviors including willingness to sacrifice and accommodation. Data collection is now complete and we are in the process of analyzing the data. (chauntel_wiggins@uemail.ucsb.edu)

MENTAL MISMATCH: THE CHALLENGE OF PREDICTING FUTURE FEELINGS

Charlene Wu & Matthew Lieberman
University of California, Los Angeles

People often try to predict how they will feel in the future, however, affective forecasting research has shown that people are often mistaken when predicting their

emotional reactions to events in the future. To explore this error, we examined whether predictions about future feelings are more closely tied to how individuals will feel "about" an event rather than how they will actually feel "in general" after the event. In other words, one could feel upset "about" who won the last election without feeling upset "in general." Findings demonstrate that individuals do not differentiate between predictions of feelings "in general" and predictions of feelings "about" specific events, but once the emotional event occurs (failing a test), feelings "in general" and "about the test" are quite different. Moreover, predictions of feelings "in general" accurately predict future feelings "about" the test but do not predict feelings "in general" after failing the test.

(charwu@ucla.edu)

PARENTAL AND PEER INFLUENCE ON RELIGIOSITY IN COLLEGE AGE STUDENTS

Adrienne Moe, Erin Walrath, Stephanie Pashby, & Rachel Ward
Seattle Pacific University

Many researchers have studied parental attachment and its effect on a child's religiosity (Gnaulati & Heine, 1997; Granquist, 2002; McDonald, Beck, & Allison, 2005; Regenerus, Smith, & Smith, 2004). In adolescence, studies show conflicting findings about whether relationships with parents (Granquist, 2002; Regenerus et al., 2004) or with peers (Gunnore & Moore, 2002) have the greatest influence on religiosity. We hypothesized that both parental attachment and peer relationships would be good predictors of religiosity among college students, but that parental attachment would be the better predictor of religiosity among students between the ages of 17 and 25. One hundred and forty-nine participants from two colleges in Western Washington completed self-report measures of attachment and religiosity. Parental and peer attachments were found to be significant predictors of different aspects of student religiosity. Parental relationships predicted how religious students said they were, as well as the degree of security they felt in knowing of God's existence. Peer relationships predicted how many religious services students attended and how often they reported having a

feeling of reverence or devotion. These findings help to clarify seemingly conflicting prior research; different characteristics of one's religious life appear to be influenced by parent and peer relationships. (moca@spu.edu)

THE EFFECT OF FINANCIAL AND EMOTIONAL SITUATIONS ON MALE AND FEMALE RISK-TAKING BEHAVIOR

Mira Krivoshey
Barnard College, Columbia University

Men are more likely to take financial risks, but are women more likely to take emotional risks? This study examined the likelihood that forty traditional aged college male and females would take financial and emotional risks. Participants were given ten questions which asked them to rate the probability of partaking in different risky situations on a scale of one to ten. A rating of ten indicated that the subject would most definitely take the risk; a rating of one indicated absolutely no possibility of engaging in the risky behavior. The mean likelihood for women to take financial risks was 3.8 and 6.8 for emotional risks. The mean likelihood for men to take financial risks was 4.31 and 5.69 for emotional risks. There was a significant interaction between gender and the type of risk $F(1, 67) = 5.14, p < .05$ -- men were more likely to take financial risks and women were more likely to take emotional risks. This finding contributed to our knowledge of risk-taking behavior in men and women, showing that women were more likely than men to take risks, given the right circumstances. (Mk2232@barnard.edu)

Clinical Psychology I (380-380W)

AN ANALYSIS OF RISK FACTORS FOR DISORDERED EATING AMONG FEMALE COLLEGIATE ATHLETES

Christina Branom
Stanford University

Female collegiate athletes face unique sport-related stresses that interact with psychological and social factors to impact their physical and mental health. This

study examines how certain athletic pressures can contribute to an abnormally high incidence of disordered eating among elite athletes, particularly in sports emphasizing leanness or aesthetics (e.g. gymnastics, diving, and cross-country). We predict that a combination of individual personality traits, pressures to maintain a certain weight or appearance for sport performance, and the eating attitudes of coaches or teammates contribute to the development of disordered eating patterns in athletes. To determine the demographic, psychological, social, and sport-related factors that put an elite female college athlete at risk for an eating disorder, we surveyed 126 female athletes from 14 varsity teams at Stanford University. We expect scores on the Eating Disorders Inventory and Eating Attitudes Test will be positively correlated with perfectionism and participation in lean or aesthetic sports (gymnastics, swimming, diving, light-weight crew, synchronized swimming, cross-country, and track and field) and negatively correlated with self-esteem and team cohesion. The findings have implications for how women can pursue elite collegiate athletics without sacrificing their physical and mental well-being. (cbranom@stanford.edu)

DISSOCIATION AND DISTORTION: FUNCTIONAL AND EFFECTIVE SIMILARITIES

Cristen McLean, Bridget Klest, &
Jennifer Freyd
University of Oregon

Both dissociation and cognitive distortions can function as useful mechanisms to reduce the impact of a traumatic experience wherein the perpetrator is someone the victim both trusts and is dependent upon. The current study looks at how psychologically defending against disruptive information such as a betrayal can occur by either not fully integrating the experiential information, as occurs in dissociation, or cognitively distorting it. Betrayal Trauma theory describes that such alterations in the perception of the experiential information can be protective because they enable the person to maintain necessary relationships (Freyd, 1996). Additionally, through either of these responses a person may be able to maintain their

foundational schemas about their own self worth as well as the benevolence and meaningfulness in the world (Janoff-Bulman, 1992). Participants' experiences and schemas were measured using the Brief Betrayal Trauma Survey and the World Assumptions Scale, respectively. The Dissociative Experiences Scale and the Dysfunctional Attitude Scale measured psychological defenses. The results from these data will be used to increase understanding about the factors that influence whether a psychological defense mechanism is utilized, which mechanism is employed in response to which occurrences, and the long-term effects of utilizing either or both of these defense mechanisms. (cmclean@uoregon.edu)

DISTRESSED AND DEPRESSED: LOW DISTRESS TOLERANCE IN DEPRESSION

Kathryn M. Fischer & Christopher G. Beevers
University of Texas, Austin

Although depression is one of the most common psychiatric disorders, relatively little is known about factors that operate in the disorder. Clinically, depression is often accompanied by an inability to cope with stressful events and stimuli. Further, smoking and suicide research has suggested a relationship between low distress tolerance and depressed mood; however, no study to date has directly examined whether depressed individuals have lowered distress tolerance. This study examines the relationship between depression and distress tolerance, as indexed by persistence on stressful psychological tasks, in individuals aged 18-59. Consistent with current recommendations, individuals scoring over a 20 on the BDI-II were classified as depressed and individuals scoring below a 12 on the BDI-II were classified as non-depressed. All individuals completed a series of randomized distress tolerance tasks: a breath holding task, a mirror-tracing task, and a mental arithmetic task (the Paced Auditory Serial Addition Task). Results indicate that depressed individuals had lower persistence on the distress tolerance tasks than non-depressed individuals. These results suggest that depressed individuals have poor distress tolerance when confronted with challenging tasks. Future prospective

designs should examine whether poor distress tolerance is associated with the maintenance of depression. (KathrynFischer@mail.utexas.edu)

ASSOCIATION BETWEEN MINDFULNESS AND PSYCHOLOGICAL DISTRESS IN A SAMPLE OF HIV+ INDIVIDUALS

Sharone Weltfreid, David Creswell, & Hector Myers
University of California, Los Angeles

The present study will examine the association between mindfulness, the process of purposefully focusing awareness on the present, and psychological distress in HIV+ individuals. Evidence suggests that mindfulness is effective in attenuating symptoms of psychological distress and improving overall psychological well-being. Studies of one mindfulness training program, Mindfulness-Based Stress Reduction (MBSR), have provided preliminary evidence suggesting that MBSR is effective in reducing psychological distress in various patient populations. It is the purpose of the present study to examine whether trait mindfulness, in the context of the baseline assessment in a randomized MBSR intervention trial, is negatively associated with psychological distress in a multi-ethnic pilot sample of HIV + adults from Los Angeles County. The association between baseline trait mindfulness and psychological distress may have implications for differences in ability to utilize and benefit from this intervention. (myers@psych.ucla.edu)

Personality Psychology (380-380X)

REGIONAL VARIATION IN THE UNITED STATES: SELF, IDENTITY, AND AGENCY

Scott Thompson & Hazel Markus
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Building on past findings of regional variation in well-being and self profiles in the United States, three studies explored the specific aspects of self, identity, and agency that underlie these divergent profiles. Using a sample of 541 high school seniors, Study 1 found that distinct models of self were present in different regions of the country, though significant national consensus

was evident as well. Studies 2 and 3 investigated the degree to which these regionally distinct profiles change when a person moves to a different region, using college students as a sample. Study 2 used a longitudinal design to track changes in self, identity, and agency across the freshman year for 298 college freshmen, while Study 3 employed a cross-sectional design with a sample of 684 college sophomores, juniors, and seniors to examine change across all four years of the college experience. These studies found substantial convergence on many aspects of self, identity, and agency through the four years of college, though some characteristics did remain regionally distinctive even among college seniors.
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WHAT DOES HAPPINESS MEAN? DEVELOPMENT OF AFFECT VALUATION IN PRESCHOOL CHILDREN Eva E. Chen, Jenny Y. Louie, & Jeanne L. Tsai Stanford University

Previous findings suggest that people differ in terms of the emotional states that they value, or affect valuation. Research has found that while European Americans value excitement and other high activation positive (HAP) affective states more than Chinese, Chinese value calm and other low activation positive (LAP) states more than European Americans. Prior studies have shown that these differences generalize to children: when told a story containing characters who preferred either calm or exciting activities, European American children preferred the excited character significantly more than the Taiwanese Chinese children. The purpose of the present research is to examine whether children learn to value specific affective states through exposure to storybooks. We hypothesize that a story book containing a character engaged in exciting activities will influence a child to prefer exciting activities, while a story book containing a character engaged in calm activities will influence a child to prefer calm activities. Through data collected from American and Taiwanese preschools, we found that exposure to exciting (vs. calm) story books did alter children's preferences for excited (vs. calm) states and their perceptions of happiness.

This finding suggests that affect valuation can be socialized at an early age through popular media.
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TEMPERAMENT AND STRATEGIES OF ACTIVATIONAL AND INHIBITORY CONTROL Laura Johnson, Jessica Kieras & Mary Rothbart University of Oregon

Inhibitory control (the capacity to suppress inappropriate approach behavior) and activational control (the capacity to perform an action when there is a strong tendency to avoid it) are of particular importance to the study of self regulation and temperamental differences in attention. The researchers combined a measure of strategies used to engage in inhibitory control and activational control behaviors with Evans and Rothbart's Adult Temperament Questionnaire (short form). Strategies were categorized as Effortful, Mental or Task management. The researchers also assessed focus on the potential punishments or rewards associated with activating or inhibiting a behavior. Through statistical analysis, the researchers expect to find correlations between activational and inhibitory control strategies and measures of adult temperament. Current research suggests that people high in negative affect should be more likely to focus on the potential detriments of failing to control their behavior and use more effortful type strategies to engage in activational control. Persons high in surgency/extroversion should focus on the benefits of regulating their behavior and use more effortful type strategies in inhibitory control. This study adds to the body of research aimed at helping individuals more effectively regulate their behavior.
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AFFECTIVE AMBIGUITY RESOLUTION IN GIRLS AT-RISK FOR DEPRESSION Silvia P. Samanez, Karen Dearing, & Ian H. Gotlib Stanford University

Adolescent daughters of mothers who have experienced recurrent clinical depression have been found to be at an elevated risk for developing depression (Beardslee et al., 1998; Hammen, 1997; Williamson et al., 2004).

Importantly, previous studies have indicated that these high-risk girls exhibit a bias for negative stimuli when processing information (Goodman & Gotlib, 1999; McCabe & Gotlib, 1993). To determine if high-risk girls also show this cognitive bias in response to social stimuli, this study presents daughters of formerly depressed mothers and age-matched control daughters with socially laden ambiguous stimuli in the form of words in a dichotic listening task and stories in a sentence completion task. As has been established in similar information processing tasks with depressed and control adults, we predicted that the high-risk girls would show a comparable attentional bias to negative stimuli whereas the control girls will not. Findings from this study have implications not only for predicting the underlying mechanisms that influence the development of depression in adolescent girls, but also for enhancing treatment procedures for adolescent psychopathology. (ssam33@stanford.edu)

Developmental Psychology I (380-380Y)

ATTENTION AND THEORY OF MIND IN PRESCHOOL CHILDREN

Katherine Smartt & Natasha Kirkham
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For decades, developmental psychologists have been interested in the concept of “theory of mind” because of the unexpected and seemingly illogical performance of young children on standard false belief tasks. Many explanations have been offered to account for the findings that young children consistently fail standard false belief tasks. The following experiments seek to investigate the role of attention and children’s subsequent performance on false belief tasks. In Experiment #1, we compare three and four year old children’s performance on a version of a location false belief task when they either do or do not have the use of a helpful marker. Experiment #2 measures three year old children’s proficiency at using markers to help them locate objects. Results from the two experiments will be discussed using the cognitive control theory. (ksmartt@stanford.edu)

FEMALE FIREFIGHTERS AND BOYS WITH BARBIES: AN EMPIRICAL STUDY OF GENDER STEREOTYPES IN PRESCHOOLERS

Dana D. Pitts & Rebecca S. Bigler
University of Texas, Austin

Past research has shown that while children may hold gender-typed views towards the behaviors of others, they often hold themselves exempt from the constraints of the same gender stereotypes (Liben & Bigler, 2002). The current study examines whether this seeming contradiction appears in preschoolers’ gender-typed views as well, and explores other aspects of gender stereotype development. Children aged 3-5 were given a shortened form of the POAT scale (Preschoolers: Occupations, Activities, & Traits) along with a new measure assessing the validity of the POAT. The POAT is a modification of the OAT & COAT (for adults and children, respectively) created by Liben & Bigler (2002). This scale is two-part: the POAT-PM assesses preschoolers’ *personal* interest in gender-typed behaviors, and the POAT-AM assesses explicit *attitudes* towards others concerning gender-typed behaviors. The new measure, the POAT-AM-2, assesses *implicit* attitudes concerning gender-typed behaviors. Data collection is still in progress, and is expected to reveal the way in which age and gender affect the development of gender stereotypes as well as whether differences in gender stereotypes exist among occupations, activities, and traits. Data will also reflect the relationship of children’s personal interests, explicit attitudes, and implicit attitudes regarding gender-typed behaviors. (dana.pitts@gmail.com)

‘DO YOU HAVE ANY ADVICE FOR ME?’ PREDICTING FOUR-YEAR-OLDS’ ABILITIES TO GIVE ADVICE TO PEERS IN SOCIAL SITUATIONS

Katherine A. Lingras & Carol Dweck
Stanford University

This study examines children’s sophistication in identifying traits and behaviors of desirable or undesirable playmates. Fifty-two four-year-olds’ answered questions about children (represented by small wooden dollhouse dolls) who “everyone likes to

play with” and who “no one likes to play with.” They also used these dolls to act out the behaviors that they think would characterize interactions with each type of child. Finally, the participants were given an opportunity to advise the doll children on how to “make other children like them.” Their conceptions of fixed goodness and badness (believing that a child’s bad behavior is permanent) were also explored by giving the children hypothetical scenarios. Teachers filled out an adapted version of Achenbach’s Child Behavior Checklist – Teacher Rating Form to assess the children’s social behaviors within the classroom. We suspected that children’s fixed badness beliefs will predict low scores on quality and quantity of advice, while high levels of social competency will predict higher scores. Our findings show support for the latter, but not the former, for the majority of children in our study. Implications of these relationships are discussed, as well as steps for future research.

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ACCULTURATION STATUS AND RELATED- PROCESSES: WHAT ETHNIC LABELS REVEAL FOR LATINO EARLY AND LATE ADOLESCENTS/EMERGING ADULTS

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Smith College

In an increasingly heterogeneous society such as the U.S., it is important to study ethnic identity since ethnic group membership is linked to one’s self-concept and identity formation. Ethnic identity is multi-dimensional and one aspect includes ethnic self-identification. For Latinos, individuals may identify with ethnic labels such as “Mexican” (national), “Hispanic” (pan-ethnic), “Mexican American” (compound), or “Mexican Black” (multi-ethnic). Knowledge on how individuals ethnically self-identify can help shed light on their unique cultural experiences, such as acculturation and related processes. As such, the current investigation was designed to examine differences in acculturation status as a function of ethnic labels. Respondents ($N=330$) were early ($n=178$) and late adolescents/emerging adults ($n=152$) of Mexican background. Findings showed that for early adolescents, those who identified

with multiethnic labels were most acculturated compared to their national and pan-ethnic label counterparts. Among late adolescents/emerging adults, those who self-identified with national ethnic labels were least acculturated and experienced the highest level of acculturative stress compared to their compound label peers. Theoretical and applied implications of these findings will be discussed.

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Paper Session II Abstracts

Developmental Psychology II (380-380C)

CHILDREN'S USE OF STORYBOOK CONTEXT TO DETERMINE THE REALITY STATUS OF NOVEL ENTITIES

Rachel Riskind & Jacqueline Woolley
University of Texas, Austin

Preschool-age children struggle to differentiate between reality and fantasy. However, many novel entities that children encounter in books or through testimony are not clearly marked as real or not-real. The goal of this research was to assess how young children determine the reality status of novel entities that appear in storybooks that are realistic, fantastical, and mixed-reality-status in nature. Forty-two preschool-age children were each read four stories, one from each of the following conditions: fantastical context with a fantastical main character (FF); realistic context with a realistic main character (RR); fantastical context with a realistic main character (FR); and realistic context with a fantastical main character (RF). Children's judgments of the reality status of the novel entities in the stories were solicited, as well as children's certainty of their answers. Results show no evidence that the reality status of context and main characters affect 4-year-olds' classification of novel entities. However, 5-year-olds are more likely to classify novel entities as real when they are encountered in a realistic context than in a fantastical context, and vice versa. This is true regardless of the reality status of the main character. Possible implications of these age differences will be discussed.

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POMEGRANATE JUICE: CAN ITS ANTIOXIDANT PROPERTIES REDUCE FETAL ALCOHOL EFFECTS?

Bradley R. Monk, David N. Linsenhardt, Nancy N. H. McGough, Hector D. Dominguez, & Jennifer D. Thomas
San Diego State University

Prenatal alcohol exposure can cause brain damage and a variety of behavioral problems, including hyperactivity, learning deficits, and motor dysfunction. Alcohol disrupts development via a number of mechanisms, including oxidative stress. Polyphenols, antioxidants found in pomegranate juice, can protect the brain from damaging free radicals. Thus, the present study examined whether pomegranate juice could reduce the severity of behavioral alterations associated with developmental ethanol exposure. Sprague-Dawley rats were intubated with 5.25 g/kg/day ethanol from postnatal day (PD) 4 – 9, a developmental period equivalent to the 3rd trimester. Controls were intubated but did not receive any alcohol. From PD 2 – 15, subjects were also intubated with either pomegranate juice or an isocaloric maltose solution. Following treatment, subjects were tested on a series of behavioral tasks. Ethanol exposure produced hyperactivity and motor deficits. Treatment with pomegranate juice significantly attenuated ethanol-related motor coordination deficits and tended to reduce ethanol-related hyperactivity. These findings may have important implications for the development of effective interventions for reducing fetal alcohol spectrum disorders.

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IMPULSIVITY AND LANGUAGE PRODUCTION: THE RELATIONSHIP BETWEEN LANGUAGE AND COGNITION

Carl L. Dambkowski & Natasha Z. Kirkham
Stanford University

A relationship between self-control and other cognitive tasks has long been suggested, both in the philosophical literature and, more recently, the psychological literature. In exploring this topic, the current study examines the relationship between impulse control and language, specifically looking at the relationship between delay of gratification and irregular noun plural production. Children were given three tasks: a language production pre-test, a delay of gratification task, and a language production post-test. Results show a decrease in post-test performance from children who exhibit behaviors consistent with excessive use of cognitive resources. In line with previous research, too, children who exhibit

behaviors that are not cognitively taxing show an increase in performance. Thus, strategies employed during delay of gratification are predictive of post-test performance in the irregular noun plural language production task. More generally, the research suggests a larger relationship between frontal function and language. Finally, in suggesting this larger relationship, the research suggests the importance of domain-general learning mechanisms in the acquisition of the English language.

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PERCEIVED KNOWLEDGE OF FAMILY NARRATIVES AS A MODERATOR OF PHYSIOLOGICAL STRESS RESPONSE TO MEDIA COVERAGE OF 9/11

Tage Rai & Marshall Duke
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Research into family narratives, or shared family stories, has suggested that individuals with more knowledge regarding the history of their families demonstrated greater mental resilience following 9/11. The current study's aim was to examine relationships between perceived knowledge of family narratives and physiological stress responses during exposure to video footage of 9/11. Participants' ($n=46$) heart rate, blood pressure, and skin conductance were measured at baseline, post-video exposure, and follow-up.

Individuals with greater perceived knowledge of their family narratives (HDYK) had significantly higher scores for follow-up heart rate ($p < .05$) and approached significance for higher scores on post-video heart rate ($p < .06$) than individuals with lower perceived knowledge of family history (LDYK). Qualitative data also found that HDYK individuals reported significantly greater discrepancies between their memories of 9/11 and what they saw in the video compared to LDYK individuals. All data consistently indicated that HDYK individuals experienced more stress when 9/11 occurred and during video exposure. Findings suggest that HDYK individuals are more likely to cope actively with stressful stimuli and may have different cognitive and emotional abilities from LDYK individuals that are important in interpreting and reconstructing potentially traumatic events.

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Clinical Psychology II (380-380W)

ATTENTIONAL AND NEURAL CORRELATES OF DIETING IN ADOLESCENT GIRLS

Keely A. Muscatell, Eric Stice, & Yalçın Abdullaev
University of Oregon

Over 5% of adolescent girls and young women suffer from threshold or subthreshold bulimia nervosa (Fairburn et al., 2000). A number of important empirical investigations have identified dieting as the most potent and robust risk factor for future onset of bulimia (Stice, Presnell, Bearman, under review; Stice, Presnell, & Spangler, 2002). Thus, the present study was designed to examine both attentional and neural factors associated with dieting behavior in a sample of adolescent girls. Fifteen adolescent girls who scored in the highest quartile on a dieting measure and 15 adolescent girls who scored in the lowest quartile on a dieting measure completed an Attentional Networking Task (ANT; Posner, 1980) while in an fMRI scanner. Results showed that girls who were dieting displayed increased attention to appetizing foods and difficulty disengaging from appetizing foods, as measured by reaction times on the ANT task. Dieters also showed increased activation of the orbitofrontal cortex compared to non-dieters when viewing appetizing foods relative to when viewing unappetizing foods. These findings are discussed in terms of their relationship to dieting and their possible implications for understanding the etiology of eating pathology.

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SEX DIFFERENCES IN AUTONOMIC CORRELATES OF CONDUCT DISORDER AND OPPOSITIONAL DEFIANT DISORDER IN MIDDLE CHILDHOOD

James Hong
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Conduct disorder (CD) and oppositional defiant disorder (ODD) are more prevalent in males than females. Unfortunately, most studies exploring the autonomic correlates of CD and ODD have not included female samples. This study examined potential sex differences in psychophysiological response patterns among

children diagnosed with CD and/or ODD compared with controls. Boys ($n=82$) and girls ($n=47$) between the ages of 8 and 12 played a game with conditions of reward and frustrative non-reward. Respiratory sinus arrhythmia (RSA), cardiac pre-ejection period (PEP), and electrodermal responding (EDR) were recorded at baseline and during the game. As predicted, boys with CD showed less EDR at baseline and less PEP reactivity than controls, whereas females showed no significant group differences in EDR and PEP reactivity. No significant differences were found in RSA. (jameson3@u.washington.edu)

THE ROLE OF STUDENT PERCEPTION OF TEACHERS ON ACADEMIC SELF-CONCEPT

Betsaida LeBron-Merino
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The Looking Glass Self-Theory suggests that one's self-concept is an internalization of others' perceptions. The purpose of the present study was to explore how student self-perceptions might be linked to their opinions of what teachers expect of them as students. Student confidence was measured in 52 junior high school students (7th and 8th graders). Also examined were possible relationships among acculturation with academic self-efficacy, and their beliefs about teacher attitudes toward students. The two hypotheses were: (1) Student perception of teacher attitudes would be related to academic self-efficacy, and (2) Highly acculturated students would report higher self-efficacy and teacher attitude scores. After controlling for grade point average, results from a hierarchical regression analysis indicated that gender (girls > boys, $p < .05$), high acculturation ($p < .05$), and teacher attitudes ($p < .001$) significantly contributed to student effort efficacy scores. All three academic self-efficacy scores were highly inter-correlated: effort, persistence, and confidence. Student self-concept is a complex construct as it includes one's gender and ethnic identity, but the students' perceptions of how teachers treat them in school (e.g., see student as a capable student) also appears linked to student reports to academic self-efficacy. This study provides some support for the Looking Glass Theory. (blebron-merino@mail.csuchico.edu)

Social Psychology II (380-380X)

ETHNICITY AND GENDER IN THE FACE OF A TERRORIST ATTACK: A NATIONAL LONGITUDINAL STUDY OF IMMEDIATE RESPONSES AND OUTCOMES TWO YEARS AFTER SEPTEMBER 11
Thai Q. Chu, Whitney Ence, Mark Seery, Alison Holman, & Roxane Cohen Silver
University of California, Irvine

This study examined ethnic and gender differences in open-ended immediate responses to an online prompt provided by a nationwide sample of 1,559 individuals in the days following the September 11th terrorist attacks. These responses were used to predict longitudinal outcomes over the following 2 years. Results showed that African Americans and women responded with more emotions (e.g., sadness, sympathy) than Whites and men. African Americans and women also endorsed violent retaliation less often than their counterparts. Responding with sadness and sympathy and endorsing violent retaliation was, in turn, associated with higher distress and posttraumatic stress (PTS) symptoms over time. Results reveal considerable ethnic and gender differences in immediate responses to traumatic events that have long-term mental health consequences. (emailtothai@yahoo.com)

JUROR DECISION MAKING: THE EFFECTS OF DEFENDANT RACE, AGGRESSION LEVELS, AND SELF-ESTEEM ON DECISIONS OF PUNISHMENT
Ny Thi Tran & Amy Hackney-Hansen
Georgia Southern University

This project evaluated the effects of race, aggression levels and self-esteem on jurors' decisions of punishment. Participants were randomly assigned to read a criminal case regarding a Black defendant or a White defendant. Participants read that a jury had found the defendant guilty and that their task was to decide the appropriate level of punishment for the perpetrator. After determining punishment participants completed questionnaires regarding their attachment styles, aggression levels, and self-esteem. Participants' aggression levels were assessed by Buss and Perry's

(1992) *Aggression Questionnaire*, and self-esteem was assessed by Heatherton and Polivy's (1991) *Current Thoughts Scale*. A main effect of defendant race was predicted, with the Black defendant being punished more than the White defendant. It was expected, however, that this effect would be moderated by participants' race, aggression levels, and self-esteem. The theoretical and applied implications of the results are discussed.
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THE ROLE OF POSITIVE EMOTIONS IN CLOSE RELATIONSHIPS

Sara Algoe, Karla Luttmann-Lopez, & Arpine Hovasapian
University of California, Los Angeles

Although previous research on emotion has focused on negative emotions, this study will examine the role of positive emotions in the quality of relationships between roommates. Same-sex roommate pairs attending the University of California, Los Angeles will participate in the study together. Participants will perform a self-evaluation questionnaire, engage in several sets of brief conversations with each other, and complete other written tasks. Participants will also perform a follow-up measure about their interactions one week later online. In testing our hypotheses, we predict that the effects of positive emotions on social interactions and relationship functioning will result in enhancing communications. Results from this study will contribute to a deeper understanding on how close relationships are critical to emotional health.
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Cognitive Psychology (380-380Y)

INVESTIGATING THE ROLE OF VARIOUS COMPONENTS OF WORKING MEMORY IN MULTIPLE OBJECT TRACKING

Rachna Mutreja & Lana Trick
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Multiple object tracking can be defined as the ability to simultaneously track the positions of a number of targets as they move around among distracters. Baddeley and

Logie (1999) proposed a model of working memory that consists of three parts: the central executive, the phonological loop, and the visuospatial sketchpad. The goal of our study is to determine what type of working memory is most strongly related to multiple object tracking using an individual differences approach. Participants were 42 undergraduate students. In order to measure the phonological loop, visuospatial sketchpad, and central executive, participants completed the digit span, Corsi blocks task, and OSPAN tests respectively. These measures were used in predicting multiple-object tracking performance in a multiple-regression analysis. Visuospatial working memory was the only type of working memory that proved to be a significant predictor of tracking performance when the two other types of memory were statistically controlled.
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MAXIMIZING CHILDREN'S PARTICIPATION: A STUDY OF REWARD AS MOTIVATION

Jamila Amarshi
Stanford University

Previous research has shown that varying rewards influences an individual's motivation to complete tasks. While there has been significant research looking at adolescent and adult motivation, children have not been a major focus of study. Classic studies from the 50s and 60s showed that in binary decision tasks, children of different ages employ a variety of choice strategies, and at approximately age four, children fundamentally change the way they make their decisions. These studies used a system of continuous reward (children were given an M&M after each successful choice) that changing social and medical conventions have rendered unusable. We explored alternate ways to replicate these findings. Further, because success on the actual task itself changes over time, we examined whether certain reward structures might prove more effective than others. Subjects between the ages of three and eight completed two hundred trials of a relatively uninteresting binary choice task. In some cases, a reward structure that awarded the child continuously after blocks of several trials was implemented. In other cases, they got a reward after completing the entire task. Preliminary

findings suggest that females are more likely to complete the task without external motivation, and both males and females are most successful when rewarded frequently throughout the duration of the task. In addition, the need for direct reward changes over time: older children seem to require less reward than younger children do. (jamarshi@stanford.edu)

FACE AND OBJECT RECOGNITION ABILITIES IN PATIENTS WITH PURE ALEXIA

Stephanie N. Manchin
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Pure alexia, an acquired reading disorder that arises from damage to the 'visual word form area' in the left occipital cortex, is widely viewed as a domain-specific deficit, in which only the processing of alphanumeric stimuli is impaired. However, recent studies suggest that this disorder may not be restricted to processing alphanumeric symbols but, instead, may be one manifestation of a more general perceptual deficit. To adjudicate between the domain-specific versus domain-general views, this study examined the face and object recognition abilities in four patients with pure alexia. The patients and matched controls performed same/different judgments on pairs of faces, common objects and novel objects (Greebles) and accuracy and reaction time were measured. In addition, further fine-grained measures of face processing were obtained (for example, comparison between performance for upright and inverted faces and performance on fine-grained discrimination between morphed faces). Not only were the patients significantly poorer at reading than the controls but they were also slower and/or less accurate on all the other perceptual tasks. These findings suggest that the damage to the left occipital cortex gives rise to deficits that extend beyond reading and that the affected cortical area is likely involved in more general perceptual processing. (smanchin@andrew.cmu.edu)

THE IMPACTS OF SHAREABILITY AND AFFECTIVE CONTEXT ON MEMORY

Michelle Baldwin, Lisa DeMarni Cromer, & Jennifer Freyd
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In cases of trauma such as child abuse it is often difficult for victims to tell others about their experiences, and sometimes the experience is not remembered or is not remembered accurately. According to shareability theory (Freyd 1983) sharing an experience with others can impact the way in which a person cognitively organizes and therefore remembers the experiences. Additionally, through activation of emotion-related schemas the affective context of an event can influence how memory for the event is stored, organized, and recalled at a later date (Crockett, 1988). In this study we investigated how sharing impacted memory by testing participant's memory for a series of images after either asking them to tell another person about the images or to think about the images. By manipulating the perceived emotional content (positive or negative) of the series of images, we further sought to examine how emotions impacted memory of the images. The results of this study can help increase understanding of how sharing information affects memory of that information, and also of how the affective context of the information can influence memory.

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Poster Session I Abstracts

Math Courtyard

PATHWAYS TO SUICIDAL IDEATION: EXAMINING PARENTAL PERFECTIONISM AND EMOTION REGULATION

Blair Kleiber, Ursula Whiteside, & Mary E. Larimer
University of Washington

High levels of perfectionistic behavior (a.k.a., clinical perfectionism) have been linked to numerous psychological problems, including depression and suicidal ideation, self-harm and plans. Studies have shown that adolescents and young adults exhibiting high levels of perfectionistic behavior are also likely to have parents who do so. In addition, these "young clinical perfectionists" are more likely to attempt or complete suicide than their non-clinically perfectionistic

counterparts. The ability to cope effectively with negative emotions (i.e., emotion regulation skills) has been found to buffer people from high intensity negative emotions that increase the likelihood of suicidal ideation and suicidal behaviors. Therefore, it would make sense that the greater access to “emotion regulation skills” an individual has, the less vulnerable they would be to the influences of a highly perfectionistic parent or parents. We found that there is a link between perceived perfectionistic parents and suicidal ideation and hopelessness (a predictor of suicidal behaviors). Level of access to emotion regulation skills was also found to have a moderating effect on the relationship between parental perfectionism and suicidal ideation and hopelessness.
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DEVELOPMENTAL CHANGES IN SEPARATIONS AND ACTIVITY OF WILD BOTTLENOSE DOLPHIN CALVES (*TURSIOPS*, SP.)

Colleen Barry & Janet Mann
Georgetown University

Bottlenose dolphins (*Tursiops* sp.) live in fission-fusion societies, characterized by frequent changes in group size and composition and long-term social relationships. As part of a longitudinal study in Shark Bay, Western Australia, we studied the developmental patterns of mother-calf separations using focal follows of 77 calves observed between 1989 and 2005. While calves are physically precocious at birth, they exhibit a prolonged period of dependency and typically nurse for three to six years. In the first year (4-11 months), calves spent approximately one-third of their time separated (>2m) from the mother. The overall time spent separated did not change from year one to year three (ANOVA: $F_{2,21}=1.12$, $P=0.335$, $N=23$), instead the distance traveled changed. In particular, males spent more time than females far from their mothers. During far separations males socialized more than females (Mann-Whitney: $U=272.5$, $P=0.048$, $N_{male}=27$, $N_{female}=29$) and females foraged more than males (Mann-Whitney: $U=254$, $P=0.024$, $N_{male}=27$, $N_{female}=29$). At closer distances no sex differences were apparent. This divergence in activity at far distances might serve as

precursors to the sex-specific adult reproductive strategies. While traveling far increases energy expended and risk of shark attack, calves that separate may benefit from increased social and foraging experience and allow mothers to forage more efficiently.
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CHILDREN'S RESPONSES TO GENDER-BASED INEQUALITIES

Virginia L. Borges, Kristina R. Olson, Elizabeth S. Spelke, & Mahzarin R. Banaji
Harvard University

“That’s not fair!” To parents, this phrase often seems to be their children’s most maddeningly recurrent refrain. Clearly, children have some understanding of what is and is not fair. However, when children are presented with a clear and repeated pattern of unequal distributions between members of different groups, a concrete example of unfairness, how do they react? One of the most salient social groups in children’s lives is gender, and this study examined children’s responses to the unequal treatment of other boys and girls. Elementary-aged children were randomly assigned to observe one gender favored over the other, and were then given the opportunity to respond to this inequality by distributing resources to new children as they saw fit. As expected, it was found that children tend to favor their own gender. Observed inequalities had an additional effect: children who observed females favored were more likely to distribute resources equally, while children who observed males favored were more likely to imitate, perpetuating the inequality. Implications for the understanding of how gender-based prejudice is learned and perpetuated are discussed.
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MEDITATION AND THE EXPRESSION OF COMPASSION TOWARD PRISONERS

Katherine Lee
Stanford University

In this follow-up study on the measurement of compassion, we examine whether meditation influences the compassionate affect, attitudes, and behavioral responses exhibited toward suffering individuals. The

study pool consisted of 240 non-meditators and 240 meditators, for a total participant pool of 480 San Francisco Bay Area adults. Since meditative practice is a core tenet of Buddhism set to cultivate compassion, its philosophy of compassion for all living things would summarily extend to compassion toward prisoners as well. The study thereby posts a letter from Mike, an actual prisoner participating in the "Write-a-Prisoner" online service, which allows incarcerated prisoners to maintain societal contact. Administered online in two parts, the survey has the participants complete a series of questionnaires in response to Mike's letter. In addition, subjects were further instructed to focus on either the suffering, anger, or happiness of the prisoner, or were given no focus. At the end of the study, subjects are offered the chance to write back to Mike, and this constituted the behavioral measure. Significant differences were found between meditators and non-meditators, with meditators writing both significantly longer and more compassionate letters. The applicability of the results for meditation as a mediator of compassion are discussed.

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THE ROLE OF THE CAUDOMEDIAL NIDOPALLIUM (NCM) IN SOCIAL RECOGNITION IN WILD-TYPE ZEBRA FINCHES (*TAENIOPYGIA GUTTATA*)

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Adult female zebra finches were bilaterally cannulated in the caudomedial nidopallium (NCM, an auditory perception area). Infusions of lidocaine, a temporary anesthetic, or saline were administered immediately prior to memory encoding. First, females were tested for preference for male or female conspecific in a two-choice paradigm. Second, females were tested for song quality preferences in a two-choice paradigm using males who sang normal or vocally distorted song. Infusions of lidocaine into the NCM did not affect partner preference or song quality discrimination. Third, the role of NCM in social recognition was tested. On day 1, females received saline or lidocaine and were allowed to interact with a male for one hour; behavior was recorded

for 15 minutes. Lidocaine treated females were significantly more likely to interact with males than controls. On day 2, the familiar male and an unfamiliar male were presented in a two-choice paradigm. Saline-treated females that interacted with a male on day one preferred this male on day two; lidocaine-treated birds that interacted with a male on day one did not maintain their preference, suggesting lidocaine inhibited encoding of the preference on day 1. Therefore, NCM may be involved in discriminating among males and in social recognition.

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BABY SIGN AND SOUNDS

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Research has shown that as English-speaking children begin to acquire verbal language skills, their focus on words increases as their focus on other aspects of language, such as sounds or gestures, decreases. Younger infants accept a broad range of sounds, but at around age 18 months, infants tend to concentrate more on verbal words as object labels. However, infants trained in baby sign learn to focus on both gestures and verbal words as a means of communication. We examined whether baby sign-trained infants could also learn sounds as object labels. We used 2 groups of infants differing in age (approximately 17 months and 22 months), half of whom had been trained in baby sign, and the other half of whom had not been trained. We predict that the older baby sign-trained infants will be able to accept sounds as object labels, but the infants not trained in baby sign will be able to only accept verbal words as object labels, but not sounds.

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NEURAL CORRELATES AND FUNCTIONAL CONNECTIVITY ASSOCIATED WITH SELF-REFERENTIAL AND CLOSE OTHER-REFERENTIAL PROCESSING

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Numerous neuroimaging studies have found self-referential processing to be associated with activations in the medial prefrontal cortex (MPFC) and posterior cingulate cortex (PCC). Self-referential encoding of trait adjectives is typically compared to processing words for general semantic meaning and relevance to a familiar other such as a celebrity. Rarely has processing in terms of oneself been compared to processing in terms of a close other such as one's mother, who may carry more of a personal salience and affective quality similar to the self than does a familiar but distant other. The present fMRI study compared self-referential and close other-referential processing. Relative to Semantic, both Self and Close Other processing were associated with activations in the MPFC and PCC. Although a significant cluster in the MPFC was found for the Self > Close Other contrast, these conditions showed greater overlapping patterns of activation than have been found in previous studies using a distant other condition. Psychophysiological interaction analyses were conducted using MPFC and PCC voxels as seed regions of interest. These analyses revealed distinct regions demonstrating greater functional connectivity for Self versus Close Other conditions in addition to common networks of neural activity shared by both forms of processing.
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DOSE-DEPENDENT EFFECTS OF ALCOHOL ON MEMORY JUDGMENTS

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Prospective memory is an area of research that is growing in memory research. Previous research on alcohol and prospective memory consists of self-report correlations. The purpose of this research was to attempt to examine in an experimental setting acute effects of alcohol on prospective memory. Participants received one of three alcohol conditions (0.00 g/Kg, 0.45 g/Kg, and 0.65 g/Kg) and were asked to rate memorability of words and tested five minutes later. Results indicate an impairment on both recall and recognition of target items. Mean prospective memory ratings decline in a dose dependent fashion, but ratings

no longer predicted performance at higher alcohol doses. Results indicate that participants are aware of impairment of memory but unable to discriminate what will be remembered.
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THE RELATION OF SELF-CONCEPT CLARITY AND ACCURACY: IMPLICATIONS FOR RELATIONSHIPS QUALITY

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There has been a long research tradition focusing on the accuracy of self-beliefs (e.g. Funder, 1980). Some prior research has looked at individual differences in the accuracy of self-knowledge but has not investigated the role of self-concept clarity. Self-concept clarity involves how clearly and confidently defined, internally consistent and stable one's self-concept is (Campbell et al., 1996). Thus, we hypothesized that those high in self-concept clarity would have less discrepancy between self/other personality trait ratings (i.e. higher accuracy). We hypothesized that both constructs would be correlated with satisfaction and commitment. Specifically, we hypothesized that self-concept clarity would be more important for satisfaction, while accuracy would be more important for commitment. Hypotheses were tested using personality ratings from 55 pairs of close friends, in each case the target was in a current romantic relationship and completed measures of self-concept clarity, relationship satisfaction, and commitment. Consistent with our hypothesis, self-concept clarity and accuracy were significantly correlated ($r = .43$). Finally, when self-concept clarity and accuracy were entered simultaneously in a multiple regression, as hypothesized, only self-concept clarity was associated with relationship satisfaction ($r = .41$), while only accuracy was associated with commitment ($r = .42$) Implications of the results are discussed.
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YOU DON'T ALWAYS CHOOSE WHAT YOU LIKE: DIFFERING PREDICTORS OF CHOICE IN INDIAN AND EUROPEAN AMERICAN CONTEXTS

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After decades of assuming people make choices on the basis of personal preferences, research has shown that personal preferences predict choice to a lesser extent in Indian cultural contexts than in European American cultural contexts. This investigation examined alternate predictors of choice that may be more salient in Indian contexts. Findings from two experiments reveal that, for Indians, perceived preferences of other people and practicality of choice alternatives predicted choice more strongly than personal preferences. In contrast, for European Americans, personal preferences may be the strongest predictor of choice. These results suggest that the link between choices and preferences is culturally constructed and not universally widespread, as frequently assumed by most psychologists and economists. (nqi@stanford.edu)

AFFECT AND THE P300 EVENT-RELATED BRAIN POTENTIAL

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Stimulus valence (positive, negative) and arousal (low, high) ratings of pictures from the International Affective Pictures System (IAPS) were systematically manipulated and employed as target stimuli in an oddball paradigm to elicit the P300 event-related brain potential (ERP). Scrambled images were constructed by dividing the picture stimuli into 1cm² sections and randomly rearranging them to produce an unrecognizable picture with the same spatial frequency characteristics as the parent picture. Subjects were instructed to respond to pictures and ignore the neutral pattern “standard” stimuli. Task performance was nearly perfect, with marginal effects for valence and arousal. Valence did not influence P300 amplitude or latency. However, P300 amplitude was smaller for low-arousal compared to high-arousal stimuli.

Scrambled stimuli demonstrated no effects for valence or arousal seen in the target images. P300 amplitude increased going from anterior to posterior sites for all target stimulus conditions. The findings suggest that arousal plays a role in cognitive processing of affective stimuli. (brozenkr@ucsd.edu)

PARENTING IN INNER-CITY NEIGHBORHOODS: RELATING GENDER, MONITORING, AND PSYCHOLOGICAL OUTCOMES

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This study examines the relations between mothers' parenting practices and children's gender, exposure to community violence, and psychological well-being. The sample included 104 poor, multiethnic fourth- and fifth-graders and their mothers living in an inner-city neighborhood. Boys were more highly exposed to community violence than girls; however, no gender differences in levels of parental monitoring were found. Exposure to community violence was associated with increased depression, anxiety, and externalizing problem behaviors. Hierarchical regression analyses indicated that exposure to community violence and parental monitoring predicted children's psychological well-being. These findings suggest that parental monitoring may serve as a protective factor for children living in violent neighborhoods. (llvw@umich.edu)

THROUGH THE OBJECTIFICATION GLASS: THE EFFECTS OF SELF-OBJECTIFICATION ON MATH AND VERBAL TEST-TAKING PERFORMANCE

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Objectification Theory posits that the pervasive objectification of women in both the media and interpersonal situations leads to vigilant body monitoring, and in turn an internalization of the observer's perspective (Fredrickson & Roberts, 1997). Previous studies have shown that this extreme form of self-consciousness can lead to a variety of negative effects

including diminished mental performance as a result of division of attention, specifically by lower standardized math scores (Fredrickson, Noll, Roberts, Quinn, & Twenge, 1998). As in previous studies, state self-objectification is induced by a mock dressing room situation in which participants try on a swimsuit by themselves as opposed to a sweater. This time, both math and verbal tests will be administered. Our interest is in finding out what effect, if any, the introduction of the verbal domain has on the performance of the female participants. Will the results of previous studies carry over, or will women, primed by their gender identity in the self-objectification condition, do better on the verbal test because of the stereotype associated with woman doing well in the verbal domain (Steele, 1997). (alubo@stanford.edu)

GAY AND LESBIAN EXPECTATIONS OF INTERACTIONS WITH HETEROSEXUALS

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While much research has examined heterosexuals' attitudes about homosexuals, the literature on homosexuals' attitudes toward heterosexuals is virtually nonexistent. The purpose of this research was to gather information regarding homosexuals' perceptions of heterosexual individuals. Using a cross-sectional survey design, sixty self-identified gay, lesbian and bisexual participants were asked to imagine an interaction with a male or female heterosexual who did or did not know about the participant's sexual orientation and to report on their expected emotions during the interaction. We expect a complex set of interactions between participant's gender, interaction partner's gender, and knowledge of participant sexuality. For example, we expect that gay men will feel more uncomfortable around heterosexual men who are unaware of their sexuality while lesbians will feel more uncomfortable around heterosexual females who are unaware of their sexuality. This research has potential implications for whether or not non-heterosexual individuals should disclose their sexuality in casual settings. (bethemily@gmail.com)

RELATIONS BETWEEN FAMILY OF ORIGIN EMOTIONALITY AND MARITAL QUALITY: EFFECTS ON PARENTING STRESS AND PARENT-CHILD RELATIONSHIPS

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The family of origin environment has been revealed to affect the quality of the marital relationship. It has also been well-established that marital relationship quality and parent-child relationships are interrelated. Parenting stress is another important predictor of parent-child relationships. The present study explored the relation between family of origin emotionality and marital relationship quality. The direct relation between marital relationship quality and parent-child relationships was also analyzed, and parenting stress was tested as a mediator in the relation. Families of typically developing children completed questionnaires and were observed in their dyadic interactions at the time the children were 3 and 4 years old. Results indicated that family of origin emotionality was a minor contributor to the marital relationship quality. No evidence was found to support the notion that parenting stress mediates the relation between marital relationship quality and parent-child relationships. Each, marital relationship quality and parenting stress, strongly and directly predicted parent-child relationships. (Ana.Ramirez@asu.edu)

EFFECTS OF HIV STATUS-RELATED SOURCE OF STRESS AND GENERAL SOURCE OF STRESS AS PREDICTORS OF PSYCHIATRIC DISORDERS

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The present study examined the difference between status-related sources of stress (ethnicity, sexual orientation, and HIV status) versus general sources of stress (finances, employment, and relationship) in predicting psychiatric outcomes, controlling for variables like sexual orientation, HIV-serostatus, drug abuse, and

alcohol dependence. We hypothesized that the stresses associated with being Black, gay/bisexual, and HIV-seropositive were more strongly associated with meeting criteria for any psychiatric disorders (i.e. depression, anxiety, or other disorder) than general life stresses (i.e. work, employment or unemployment, finances, and relationships). The sample consisted of 502 US-born African-American males living in Los Angeles County. A 2 x 2 ANOVA and a logistic regression were utilized to examine the association between the variables. We expected that there would be a strong association between stress, both status-related and general, and mental health, but that status-related stresses would confer greater risk for psychiatric disorders than general life stresses.

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THE EFFECT OF ATTITUDES AND SOCIAL ACCOUNTABILITY ON LITTERING BEHAVIOR

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Social psychologists have long investigated the relationship between attitudes and behavior (Kraus, 1995). Jones, Sigall and Page (1971) studied the social influences on expressed attitudes. Their hypothesis was that people sometimes communicate attitudes that are different from what they truly believe. One real world example is littering behavior. While most people dislike the appearance of litter, it is still a common behavior. This study was designed to examine how factors such as social accountability, personality traits, and attitudes predict littering. One hundred and six students from Seattle Pacific University were asked to rate a series of pictures, some with litter and some without, for aesthetic appeal. The study was conducted in two classrooms, one that was large and one that was small. Once the participants had finished the survey and left the room, any envelopes (which had previously contained the research materials) left behind by the participants were collected. Attitudes toward the non-littered environment predicted littering behavior, but attitudes toward littered environments did not. More students littered in the large classroom than in the small one, indicating the possible

influence of social accountability on behavior. Finally, there was a relationship between self-reported agreeableness and positive attitudes towards clean environments.

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EMERGENCE OF THE "MUTUAL EXCLUSIVITY" STRATEGY FOR INTERPRETING NOVEL WORDS: A LONGITUDINAL STUDY OF ONLINE PROCESSING FROM 14 TO 18 MONTHS

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When young children see a familiar and a novel object (e.g. ball and whisk) and hear, "Which one's the dax?", they typically choose the whisk, as if assuming the novel word must refer to the novel object. Numerous studies using offline measures show this type of exclusionary learning, dubbed "mutual exclusivity (ME)" by Markman (1989). Although theorists disagree on how to interpret this (Merriman&Bowman,1989; Mervis&Bertrand,1994), the ME effect has been widely observed in children as young as 15 months (Markman, Wasow, Hansen,2003). Halberda (2003) used a preferential-looking method to ask whether even younger infants show an ME response when hearing a novel name. 14- to 17-month-old infants saw pictures of a car and a phototube and heard Where's the car? or Where's the dax? Halberda found that only 17-month-olds looked reliably at the novel object in response to dax; 16 month-olds were at chance, and 14-month-olds fixated the familiar image instead. This finding was interpreted as evidence that the ME strategy emerges around 17 months. The current study was an attempt to replicate Halberda's experiment using more sensitive online measures. In our "looking while listening" procedure, infants viewed two images of objects and heard a voice labeling one object. When hearing a familiar target word, all ages reliably oriented toward the correct object.

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RELATIONS BETWEEN PHONEME AWARENESS AND LETTER KNOWLEDGE IN AT-RISK KINDERGARTENERS

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Alphabetic knowledge and phoneme awareness are vital components of successful literacy development, but it is not yet known how letter knowledge and phoneme awareness may be related. Children who had been identified at the beginning of kindergarten as at-risk participated in an ongoing intervention emphasizing development of letter names and sounds, phonological awareness and oral language skills. Participants were tested at regular intervals using the DIBELS tests. Letter name knowledge predicted emerging knowledge of initial sounds after two months (N = 10), followed by a bi-directional relationship between the two variables. After further development of phoneme awareness, letter sound knowledge was reciprocally related to phoneme awareness. The relationship between phoneme awareness and emerging letter sound knowledge was similarly seen in a second intervention phase (N = 30). In the second phase, letter name knowledge predicted letter sound knowledge, but letter sound knowledge was best predicted by increased phoneme awareness. Results suggest that letter name fluency initially facilitates kindergartners' ability to isolate and manipulate phonemes, which in turn helps them to learn the sounds associated with letters. Letter sound knowledge may also help children to develop the phoneme awareness skills, which are required for success in learning to read.
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Linguistics Courtyard

EARLY READING INTERVENTION FOR AT-RISK KINDERGARTENERS: PRINT CONCEPTS AND ATTENTION

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Knowledge about print concepts is an important predictor of reading achievement. Children with attention difficulties may have difficulty attending during shared reading experiences, rendering them especially vulnerable for reading problems. In the present study we

examined the role of attention problems in the development of early literacy skills. Kindergartners who had been identified as at-risk by their teacher (N = 10) participated in a one-on-one early intervention program for 30 minutes 4 times a week for 2 months. The children completed regular assessments of their early reading skills and print concepts, and the teachers and tutors rated the children's attention at the beginning and end of this phase of the program. Five children were also rated as having attention problems. As predicted, attention problems were associated with lower print concepts scores, but only at the beginning of the intervention. As the children progressed in the program, the relationship between attention problems and print concepts weakened, despite the lack of a change in the attention ratings for these children. These results suggest that intensive and explicit training in early reading skills for children who enter kindergarten with deficient early literacy skills is also beneficial for children with attention problems.

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EXPRESSIVE VOCABULARY AND PHONEME AWARENESS DEVELOPMENT IN AT-RISK KINDERGARTENERS DURING AN EARLY READING INTERVENTION

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Oral language and reading skills are known to be related in established readers, but how this relationship develops in beginning readers is not yet well understood. In this study we examined whether an intervention program for kindergartners at risk for later reading problems would be linked with improvements in expressive vocabulary and phoneme awareness. We also studied whether expressive vocabulary growth facilitates phoneme awareness, as has been hypothesized. In the initial pilot (N = 10) and secondary (N = 30) phases of the program, kindergartners identified as at-risk received tutoring in alphabet skills, phonological awareness, and dialogic reading for 30 minutes 3-4 times a week for 2 and 3 months respectively. Performance on the DIBELS tests showed significant improvements in phoneme awareness and

some measures of expressive language within both phases. Initially, expressive vocabulary was unrelated to phoneme awareness abilities, possibly due to floor effects in both measures. As expressive vocabulary and phoneme awareness skills improved, they were significantly correlated. These findings suggest that the intervention program was associated with improvements in oral language and early reading skills. We examine the implications of these findings on the hypothesis that vocabulary growth drives the development of phoneme awareness.

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STEREOTYPE THREAT IN MEN: EFFECTS OF MALE STEREOTYPES IN ADVERTISEMENTS

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Most of the previous research using stereotype threat focused on the potential damage to women's and ethnic minorities' lives caused by making negative group stereotypes apparent. Although minimal, studies on men have found that they can experience disruptions in their ability to process affective and social information when a negative male stereotype is made salient (Leyens et al., 2000; Koenig & Eagly, 2005). The present study examines how the male stereotype conveyed in print advertisements can influence men's decisions to participate in discussions where they may be judged based on negative aspects of this stereotype.

Participants (54 male and 47 female) viewed either a set of 10 control ads or a threatening set with five additional ads depicting men stereotypically. They then completed a survey measuring their interest in 15 seminars, five of which involved negative male stereotypes. We hypothesize that the men in the threat condition will avoid these discussions more than any other group.
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CAUSAL LEARNING FROM BIASED SEQUENCES

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Causal beliefs play a significant role in many areas of cognition. Many psychological theories provide case-by-

case updating rules that specify how one learns causal relationships. One powerful experimental tool for distinguishing between theories is the use of biased sequences: those in which the correlation between putative cause and the effect shifts over the course of learning. In a series of experiments, published in the Cognitive Science Conference Proceedings 2005 and 2006, we explore the effects of variation in both sequence length and biasing strength on one's causal beliefs. Previous research has focused mainly on final belief ratings. However, using two novel methods of analysis, examining the slope of the learning curve and the precise pattern of changes (in response to identical data), we are able to analyze the participant data in substantially more detail. We find few standard order effects (all of which show primacy effects), we find that these order effects appear independent of sequence length, and we find that our participant population to be non-uniform with regards to causal learning strategy. More generally, the effects of prior observations on subsequent learning appear to be substantially subtler than previous analyses reveal.

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WHATEVER YOU SAY: HOW AUTHORITY FIGURES' BELIEFS ABOUT INTELLIGENCE AFFECT OUR BEHAVIOR

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Carol Dweck as classified theories of intelligence into two general beliefs: the entity theory (intelligence is something we're born with and is fixed) and the incremental theory (intelligence can be changed). This study examined how people's behaviors and beliefs are affected environmental cues implicitly endorse one view or the other. In this study, subjects were given a task at which they were guaranteed to fail, and were then presented with a number of behavioral and belief measures. While there were no differences between conditions on any of the behavioral measures, subjects in the entity condition were more likely to espouse an entity theory than those in the incremental condition. Further studies are planned to determine if this can be

attributed to an authority figure's implicit endorsement or simply environmental priming.

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INVESTIGATING THE NEURAL COMPONENTS OF DISGUST

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This study investigates the relationship between emotional intensity and corresponding neural activity. To address this question in the context of the disgust emotion, fMRI data was reanalyzed from a study by Ochsner, Ray, Cooper, et al. (2004). In their study, participants were instructed to up- and down-regulate their emotional responses to negative or neutral pictures taken from the International Affective Picture System (IAPS) during scanning. In the present study, ratings of disgust were generated for each of the pictures by a group of 16 independent raters. By using the mean picture ratings in a parametric modulation analysis that codes each picture with the rating, it is hypothesized that activity within the insula will vary in accord with the intensity of the disgust emotion elicited by the picture, as well as the reappraisal instruction. These results will more broadly inform the debate over whether emotions of the same valence rely on both overlapping, as well as exclusive, neural regions. The results will particularly relate to the question of whether the insula is more central to the experience of disgust than other negative emotions.

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ENCOURAGING OUR YOUTH: THE EFFECT ENCOURAGEMENT HAS ON THE ACADEMIC PERFORMANCE OF ETHNIC MINORITIES

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Los Angeles area high school students from ethnically diverse schools (N = 1051, mean age = 15.29) were asked in a survey how much they felt encouraged by their parents, teachers, and fellow classmates to do well in science, math, and English. Students also were asked to report their typical grades earned in science, math and English. A comparison between the level of encouragement in each field and grades reported in the

same fields will be examined to measure the predictive value that encouragement has on academic performance. More specifically, this study will examine whether the person doing the encouragement has a different predictive value on academic performance based on student ethnicity. Implications for parent and teacher involvement in school, as well as academic performance among ethnic minorities, will be discussed.
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PEER STRESS AND RISK FOR DEPRESSION IN A SAMPLE OF ADOLESCENT GIRLS.

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Poor social functioning and negative peer relationships among depressed adolescents have been demonstrated; however it remains unclear as to whether these social correlates precede or result from the depressed state. The present study seeks to clarify the issue by studying an at-risk population of daughters age 10 to 14, as existing research on depression has shown that daughters of depressed mothers are at higher risk for developing depression than are offspring of non-depressed parents. Daughters of depressed mothers and control daughters without family history of depression were asked to report on the number and nature of stressful life events and chronic stressors experienced in their relationships with peers over the last year. Participants were also asked to respond to a questionnaire providing a self-report measure of their perceived social competence. It is hypothesized that at-risk daughters will report more numerous and more severe social stressors in comparison to control daughters and that they will report lower perceived social competence.

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PERCEPTIONS OF THE STUDENT-TEACHER RELATIONSHIP AND CHILDREN'S ACADEMIC OUTCOMES

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Though many studies have addressed the association between student-teacher relationships and children's school adjustment, much of the developmental literature has focused on examining the relationship from the teacher's perspective only. This study's purpose is to examine both student and teacher perspectives of their relationship and how these perceptions relate to children's academic achievement and attitudes towards school. Questionnaires were created and administered to three teachers and 44 elementary school students to assess perceptions of their student-teacher relationship. Participants rated how much they agreed with a set of statements that measured the closeness, conflict, and dependency in their relationship. To assess whether perceptions of the student-teacher relationship predicts children's academic success and attitudes towards school, students' and teachers' ratings of positive and negative aspects of their relationships were regressed onto children's academic performance scores and ranking of school importance. It is expected that student and teacher perceptions of a positive relationship will be predictive of higher academic scores and ratings of school importance, whereas perceptions of a negative relationship will be predictive of lower academic scores and ratings of school importance. By gaining a greater understanding of how perceptions of the student-teacher relationships relate to student outcomes, this study hopes to find ways in which children can improve their academic performance, self-concept, and prosocial behavior.
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REGIONAL DISTRIBUTION AND BEHAVIORAL CORRELATES OF SEROTONIN 5-HT_{2A} RECEPTORS IN ALZHEIMER'S DISEASE: A CONSTANT INFUSION STUDY WITH [18F]DEUTEROALTANSERIN AND PET
Lekshmi Santhosh
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Post-mortem studies have shown reductions in brain serotonin 2A receptors (5-HT_{2A}R) in Alzheimer's disease (AD). Converging lines of evidence also suggest that serotonergic dysregulation may contribute to cognitive impairment and behavioral changes in AD. This study aimed to define regional reductions in 5-HT_{2A}R in AD

subjects and examine their behavioral correlates. Nine subjects who met NINCDS criteria for probable AD and eight age/sex-matched healthy controls were enrolled. Regional binding of 5-HT_{2A}R was measured using a constant infusion paradigm for equilibrium modeling of the radioligand [¹⁸F]deuteroaltanserine with positron emission tomography (PET). Region-of-interest analyses were performed on PET images, which were coregistered to MRI scans acquired from each subject. The outcome measure RT i.e., ratio of specific to non-displaceable uptake (cortical – cerebellar activity / cerebellar activity) was obtained for several cortical regions. AD subjects showed a statistically significant decrease in RT in the anterior cingulate (p=0.03) but in no other cortical region. Within AD subjects, no significant correlations were observed between anterior cingulate RT and measures of cognition or ratings of depression or psychosis. These results suggest that 5-HT_{2A}R binding is reduced in the anterior cingulate of AD patients, but the extent of this reduction is unrelated to cognitive or behavioral symptoms.
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THE EFFECTS OF PRAISE ON CHILDREN'S IMPLICIT THEORIES

Holly-Marie Arce, Andrei Cimpian, Ellen Markman, & Carol Dweck
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Language strongly impacts on the nature and scope of inferences people make. One way is that generics may generalize properties of individuals across time and situations, leading to a belief in the stability of traits (e.g., compare "John is generous" to "John gave generously to charity"). This analysis leads us to a different interpretation of Kamins and Dweck (1999) which evaluated the effects of person praise ("You're really good at this") versus process praise ("That's the right way to do it") on the coping strategies of children. They found that person praise created a belief in the stability of traits (an entity theory), leading to helpless responses to failure including: lower rates of persistence, strategy generation, overall affect, and more denigration of their own performance. We propose that differences in generics could account for their results: person praise

used generic language while process praise used non-generic language. To test this, we replicated Kamins and Dweck varying the generic nature of the praise: "You are a good drawer" vs. "You did a good job drawing." Our study links generic praise to helpless behaviors in 4 ½ year-old children (n=24), suggesting that generics could help shape an entity theory in children, resulting in helpless behavior when faced with failure. (harce@stanford.edu)

ADOLESCENTS' PERCEPTIONS OF DISCRIMINATION

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While discrimination itself can be debilitating, perceiving and attributing negative outcomes to discrimination can serve as an effective coping mechanism. The current study uses the naturalistic occurrence of Hurricane Katrina to examine three factors involved in perceiving racial and class-based discrimination among adolescents: age, social group membership, and percentage of cross-race friends. Participants aged 12 to 17 completed a questionnaire designed to measure levels of perceived discrimination. A positive correlation is expected between levels of perceived discrimination and (1) participants' age and (2) participants' reported percentage of cross-race friends. Overall, it is predicted that participants from traditionally stigmatized groups will perceive more discrimination than participants from traditionally non-stigmatized groups. (jess2219@yahoo.com)

"2K KIDS", A PILOT STUDY: EXPLORING THE EFFECTS OF A COMPUTER INTERVENTION PROGRAM ON PRESCHOOL CHILDREN'S PHONOLOGICAL AWARENESS

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The present study implemented a pilot computer-assisted instruction (CAI) program to improve the phonological awareness of sixteen preschool children ($M = 50.69$, $SD = 2.65$). Participants were randomly assigned to the CAI or control group. Children exposed to CAI were enrolled in a four-week intervention working

one-on-one with college student volunteers twice a week. The children's phonological awareness was assessed through three subtests of the Pre-Reading Inventory of Phonological Awareness (PIPA): Syllable Segmentation, Rhyme Awareness, and Alliteration Awareness. Results indicate that the CAI group made significantly greater progress than the control group on the Rhyme Awareness task. A follow-up study was replicated among 15 low-income children ($M = 53.87$, $SD = 3.63$) at a university-affiliated state preschool program. Results indicate that the CAI group made marginally significant improvements on the Rhyme Awareness task as compared to the control group. Implications for improving young children's pre-literacy abilities and for future research are discussed. (alexandra.thurston@gmail.com)

SEXUAL ORIENTATION AS A PREDICTOR OF RISKY SEXUAL BEHAVIOR IN AFRICAN-AMERICAN MEN

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The purpose of the present study is to investigate the relationship between sexual orientation and risky sexual behavior. HIV-serostatus, drug abuse, alcohol dependence, and social support will be treated as additional predictors/control variables of risky sexual behavior. A central goal of the study is to enhance understanding of the factors that contribute to HIV transmission. A sample of 502 U.S. born African-American men who differed by sexual orientation and HIV-serostatus were recruited. We hypothesize that HIV negative bisexual men who abuse drugs and alcohol and have high social support will engage in more risky sexual behavior than their heterosexual and gay HIV positive counterparts. A 2 x 3 ANOVA will be conducted, testing for significant group differences in sexual behavior as a function of sexual orientation and HIV-serostatus. Stepwise multiple regressions will be run to estimate the relative contribution of each of the predictor/control variables on sexual behavior. (clopez83@ucla.edu)

INVESTIGATION OF OLFACTORY AND
NEUROPSYCHOLOGICAL FUNCTIONING IN
CHILDREN WITH SLEEP DISORDERED BREATHING
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The spectrum of sleep disordered breathing (SDB) ranges from primary snoring to obstructive sleep apnea (OSA). It has been reported that SDB has serious sequelae in adults; however, SDB in children has been less studied. SDB is reported to affect up to 3% of children and is associated with significant morbidity. One potential negative sequela in children is a deficit in neuropsychological functioning. This may be precipitated by a lack of oxygen to the brain during sleep. There are currently no studies that have shown the effect of SDB on olfaction in children. The present study examined the effects of SDB on olfaction and cognitive function before and after surgical intervention to see if impairments were seen in the surgical group compared to age and gender matched controls. Olfactory and neuropsychological tests were administered to two groups of children (ages 4-17). The surgical group consisted of children undergoing adenotonsillectomy who were tested before and after surgery. The control group consisted of normal, healthy children not undergoing surgical intervention who were tested 12-14 weeks apart. Data were analyzed with repeated measures analysis of variance. Results demonstrated that there are trends toward olfactory and neuropsychological dysfunction in children with SDB.
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THE EFFECT OF VISUAL IMAGERY ON HEALING IN
VARIOUS INJURIES AND ILLNESSES
Mallory Taylor & Vaibhav Saria
University of Arizona

The effect of visual imagery has been a contested domain for a considerable time; this experiment will strive to measure the effect, if any, of a canned visual imagery technique on various injuries and illnesses. Participants were trained in a visual imagery technique and then asked to practice that every day for two weeks. The control group was not trained or asked to perform

any such task. This experiment will also try to see whether visual imagery if used in conjunction with traditional medicinal procedures (anti-biotic treatments) is more effective than not. The illnesses ranged from the common cold to ailments related to long term injuries. The effect and the progress of the participants were measured through SAI, PANAS, general information questionnaire, and self reported logs. The progress was measured through 14 days; which could be a variable that affected the results since some illnesses healed within a far shorter duration than the allotted time period.
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COMPARISON OF DIFFERENT DURATIONS OF
CHRONIC STRESS ON HIPPOCAMPAL FUNCTION
AND MORPHOLOGY IN THE MALE RAT
J. Gomez, K. J. McLaughlin, S. E. Baran, & C. D.
Conrad
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A recent study suggested that 2 hour restraint for 10 days was equally effective in producing stress-induced CA3 dendritic retraction and spatial memory impairments as 6 hour restraint for 21 days. In this study, we examined different durations of wire mesh restraint and psychosocial stress on hippocampal function and dendritic morphology. Male Sprague-Dawley rats were restrained for 2 or 6 hr/day for 10 or 21 days. In addition, another cohort of rats were housed in the same chamber as the restrained rats to determine whether being in the presence of restrained rats would influence hippocampal function and morphology. At the end of chronic restraint, rats were tested on the Y-maze to assess hippocampal function and then brains collected for morphological quantification. Preliminary data show that spatial memory was impaired in the 6 hour restraint for 21 days condition only, while restraint for 6 hr/10 days and 2 hr/21 days were ineffective at impairing spatial memory. Results for psychosocial stress were mixed. The morphology data are currently being analyzed. These results emphasize that we should continue the 6 hr/ 21 day restraint paradigm and suggest that rat strain and type of restraint are critical variables in chronic stress paradigms.
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SELF/OTHER OVERLAP WITH GOD

Carissa Sharp
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This research focuses on self/other overlap with God. Self/other overlap is the perception having an overarching sense of “we” rather than “you and me” with an “other.” It has previously been studied in regards to the relationship between a person and a concrete “other,” such as a romantic partner, but not in the relationship between a person and his or her concept of the divine. This study assesses members of Christian congregations ranging from Unitarian Universalist to Foursquare in order to determine whether there are differences in self/other overlap with God across both gender and denomination. Questionnaires are used to measure participants’ self/other overlap with God as well as factors such as religiosity, biblical foundationalism, sexism, right-wing authoritarianism, and collectivism, which may influence a person’s perceived relationship with God.

(sharpie543@yahoo.com)

THE SHARING OF CODES BETWEEN ACTIONS STORED IN MEMORY AND ACTIONS REQUIRING IMMEDIATE EXECUTION

Ryan McMeans, Lisa Fournier, & Matthew Wiediger
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Before we can execute a planned sequence of actions, another action may take precedence. Past research suggests that if an action being executed shares an “action component” with a sequence of planned actions held in memory (e.g., both actions require the same hand), execution of the former is delayed. This phenomenon, referred to as compatibility interference (CI), is assumed to occur because the action code required for immediate execution is occupied in memory, and is temporarily unavailable. We determined whether CI is due to compatible action codes or to compatible cognitive codes. Two stimuli (A and B) occurred in a sequence. Participants planned and held in memory a sequence of three key-presses with their left or right hand based on stimulus A. When stimulus B occurred,

participants immediately executed a vocal response, “left” or “right” based on the stimulus’ color. Only the cognitive codes (response descriptions), and not the action codes (physical response requirements), were compatible or incompatible between stimulus A and B. Results showed that the time to initiate a vocal response to stimulus B was delayed when its verbal code was compatible with the motor response for stimulus A. Thus, cognitive code compatibility is sufficient for CI. (calicman02@aol.com)

COLOR PERCEPTION AND PREFERENCE

Anna Deng & Bonnie Streff
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The purpose of this study was to understand how personal preference influences the perception of color. Questions central to this investigation included: Does preference influence visual perception? Do males and females prefer and see color similarly? In order to test these questions a study was designed which asked thirty participants to rate an ambiguous color on a 1-7 scale, determining how close this color mixture was to each of its component parts. For example, participants were shown a blue-green mixture and asked to identify how “blue,” “green” or equally mixed it was. Researchers hypothesized that participants would be more inclined to perceive or “see” their favorite color as a stronger element in equal mixes of two colors. The hypothesis was supported by the results and it was found that subjects perceived more of the color they preferred and less of the color they disliked. Also, the range between participants’ rankings of color was striking. This variance implies that colors are not perceived universally and that color is incredibly subjective and unique to each individual.

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Poster Session II Abstracts

Math Courtyard

FACULTATIVE CAUSAL REASONING IN RATS

Aaron P. Blaisdell, Kenneth J. Leising, & Jared Wong
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Blaisdell, Sawa, Leising, and Waldmann (2006) reported evidence of causal reasoning in rats. A Light (L) was established as a common cause of a Tone (T) and Food (i.e., $L \rightarrow T$ pairings, followed by $L \rightarrow \text{Food}$ pairings). When presented with T alone on a subsequent test trial, they looked for food in the feeding niche, suggesting they attributed T to its cause—L—and thus expected L's other effect (Food). If, however, rats were given the opportunity to turn on T by pressing a lever, they did not look for food. This suggests that they attributed T to their own action rather than to L, and thus did not expect food. This also suggests that intervening on T by a lever press removed the causal link between L and T. If rats engage in such a sophisticated causal reasoning process, the effects of an intervention on T in one instance should not affect attributing T to L in another instance in which T was merely observed. We tested this prediction using a within-subjects design in which rats had the opportunity to both observe T and to lever press T in separate sessions.
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NARCISSISM AND BOREDOM CORRELATION: EFFECTS ON THE SELF AND SOCIAL INTERACTION

John Knorek & Sanjay Srivastava
University of Oregon

Investigated the correlation between narcissism and boredom in 110 same sex dyadic pairs. A series of questions fueled a dialogue, in which coupled participants conversed on a matter of intimately escalating prompts for 30 minutes. Multiple techniques were administered to comprise individual's narcissism and boredom tendencies, including holistic behavioral video coding, multiple questionnaires, and directed free write self reports. Scores and data from the various sources were analyzed, illuminating whether narcissists experience a higher level of boredom than their partners. Results aim to recognize narcissist's boredom proneness, narcissism correlates, and the effects

narcissism has on others. Results are still in process; we hope to both illuminate the relationship between boredom and narcissism and how it effects social interaction and relationships.

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DOES EXERCISING WITH OTHERS ENHANCE THE PSYCHOLOGICAL BENEFITS OF AEROBIC EXERCISE FOR WOMEN?

Carrie Brecht, Jessica Carrow, Carissa Gores, & Anne Imbs
Santa Clara University

Previous research has demonstrated a variety of psychological benefits to participation in aerobic exercise. In this study, social contact was examined to determine if the psychological benefits of exercise are enhanced by social contact among women. One hundred and twenty eight female college students were randomly assigned to one of three 20 minute experimental conditions. Participants in group one biked alone, group two biked with a stranger, and group three biked with a friend that they brought with them to the laboratory session. Prior to and following their laboratory session, all participants completed the Activation-Deactivation Adjective Check List (AD-ACL) measuring state levels of calmness, tension, tiredness and energy. The results lead the researchers to conclude that enhancing comfort and improving tiredness are best achieved by exercising with a friend while enhancing calmness can best be achieved by exercising alone. A follow up study is currently in progress focusing on the physiological effects of exercise with or without a friend in outdoor and indoor settings. The results of the follow up study are expected to be ready for the Stanford conference in May.
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SEX AND SPECIES DIFFERENCES IN DELAYED CONDITION TASTE AVERSION LEARNING IN RODENTS

Amy Amira, Jessica Boyle, Riana Chagoury, Gregory Corry, Kenneth Fujii, Julian Gallegos, Ashley George, Taryn Livingston, Jennifer Nam, Rachelle Reeder, Jonathan Roschke, Alysha Thompson, & Michael Foy
Loyola Marymount University

Sex and species differences reveal that hormonal and genetic variables help mediate learning and memory function. Our laboratory has previously identified distinct sex and age differences in rats using the delayed conditioned taste aversion (CTA) learning paradigm. In the current study, we examined the impact of sex (male vs. female) and species (rats vs. mice) differences on this form of learned behavior. Following standard 4-hour delayed CTA protocols, a two-bottle preference test (saccharin vs. water) was administered to all subjects during a 20-day test period. During the first 10 days of testing, when group differences were greatest, male rats had a much lower saccharin preference (48%) than female rats (83%). Surprisingly, sex differences were not seen in mice (63% for both males and females). Also, male rats developed slower extinction rates to the novel saccharin (stronger CTA) compared to female rats and both groups of mice (males and females). These results suggest that delayed CTA learning can vary depending upon both sex and species type. Furthermore, these results may provide a better understanding of learning and memory function in different animal models. (mfoy@lmu.edu)

BODY ESTEEM AND ETHNICITY

Clarissa Nicole Wang
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This study investigated the relation between ethnicity and body image among Chinese-, Korean-, and Euro-American college women ($N = 200$). Korean-American women scored lower on the overall Body Esteem Scale and its Sexual Attractiveness subscale than Euro-American women with Chinese-American students scoring in the middle. Follow-up analyses performed using a newly created BES's subscale combining all of the racially salient body parts (e.g., nose, face, and eyes) indicated that both Chinese- and Korean-American women scored lower on this measure than Euro-American women. Contrary to hypothesis, Euro-American women did not show a greater level of weight concern. Although Korean-American participants were more religious than other participants and the two Asian groups tended to show more personal sensitivity and

come from families of more recent immigrants than the Euro-American participants, controlling for these characteristics did not affect the findings. The findings of this study are important in showing that Asian Americans are not a homogeneous group in their body esteem and in demonstrating that race-related differences in the appearance of one's body are a source of discontent among first and second generation Chinese- and Korean-American college women. The implications of the findings for the relation between race and acculturation are considered. (cwang@wellesley.edu)

TRACE FEAR CONDITIONING AND THE ESTRUS CYCLE

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Trace and contextual fear conditioning are dependent on the hippocampus, an area of the brain in which delta GABA_A receptor is highly expressed. Neurosteroids such as progesterone bind with high affinity to delta GABA_A receptor. During the diestrus phase of the estrus cycle in female mice, progesterone levels peak and delta GABA_A receptor expression increases, resulting in increased hippocampus inhibition. Past research has shown that genetic deletion of the delta subunit enhances trace conditioning in female, but not male, mice. We hypothesized that this increased inhibition in the hippocampus would decrease trace and contextual fear conditioning in diestrus. In our study, a trace conditioning procedure using tone-shock pairings was conducted on female mice in estrus or diestrus and fear was measured by freezing levels. Results indicated impaired acquisition and retention of context and trace fear conditioning during diestrus, suggesting that enhanced inhibition during diestrus impairs hippocampus-dependent fear learning and memory. (smadsen1@ucla.edu)

RESTRAINT STRESS BLOCKS ACCELERATING EFFECTS OF SOCIAL CUES OF REENTRAINMENT IN *OCTODON DEGUS*

Rebecca Lane
University of Michigan, Ann Arbor

Circadian rhythms are responsible for the 24h oscillation of many of the metabolic and physiological processes experienced by almost all organisms. They allow the organism to remain synchronous with its environment. Disruptions to this cycle are associated with the negative symptoms often referred to as jet lag. The diurnal rodent, *Octodon degus*, has been found to accelerate reentrainment following a phase shift of the light:dark cycle when exposed to social odor cues from conspecifics, however less is known about the specific mechanism by which odor acts to speed reentrainment. It has also been shown that restraint stress delays reentrainment in degus. In the present study, female degus underwent a series of 6h photic phase advances while experiencing either restraint stress alone or restraint while simultaneously being exposed to odor from a previously entrained female degu. Odor was not found to affect the number of days for reentrainment when paired with restraint stress. We conclude that restraint stress blocks the accelerating effects of odor. (beckersl@umich.edu)

THE ROLE OF SOCIAL RELATIONSHIPS IN MEDIATING THE STREE-HEALTH LINK

Tina Dharmapanij & Jeanette Valentine
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Several studies have identified social interaction as a key factor in positive health outcomes, effective coping with stress, and longevity. What remains less understood is the mechanism by which positive social relations influences positive health outcomes. Antonovsky (1987) developed the concept of sense of coherence (SOC) which reflects the extent to which an individual feels the pervasive and enduring confidence that stressors are comprehensible, manageable, and meaningful. The goals of this study are to investigate the relationship between social relationships and SOC, and to determine if SOC will have bearing on health in a stressful environment. Based on theoretical models and previous research findings, it is predicted that students with fewer stress symptoms will have better social relationships and higher sense of coherence than students with a greater number of stress symptoms.

Social relationships, cognitive appraisal, and stress resistance were measured by the Positive Relations with Others Scale (Ryff, 1989), Sense of Coherence Scale (Antonovsky, 1987), and the Inventory of Stress-Related Symptoms (Sheridan, 1981) respectively. As college students are undergoing major life transitions and encountering high levels of stress, examining which factors promote better stress-health resistance in the early years will prove essential for life-long health promotion.

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PSYCHOLOGICAL AND SOCIAL CORRELATES OF DRINKING GAMES PARTICIPATION IN FEMALE COLLEGE ATHLETES

Amy Constantine & Byron L. Zamboanga
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While prior research on college students has shown that athletes consume higher levels of alcohol than non-athletes, little is known about the correlates of drinking behaviors in this population. Drinking games (DG) are popular social events on college campuses and they also facilitate heavy alcohol use. DG are social in nature and require social cohesion to function; thus, team norms surrounding alcohol use, team social cohesion, and extroversion may influence increased participation in these games. The scant literature on DG has also revealed a positive association between alcohol expectancies (i.e., anticipated effects of alcohol use) and increased participation in DG. Thus, the current study was designed to examine relevant correlates of DG, including team social characteristics, personality, and alcohol expectancies. Participants were female athletes (N=187) from a Northeastern college. Findings showed that athletes who participated in DG reported elevated team norms surrounding alcohol use and high levels of extroversion. These participants also reported increased levels of positive expectancies and evaluated both positive and negative expectancies favorably. Theoretical and applied implications will be discussed. (aconstan@smith.edu)

GRATITUDE EXPERIENCES ACROSS THE LIFE SPAN

Anjali Mishra & Todd B. Kashdan
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Past research has shown that older adults experience more positive emotions compared to younger adults. However, minimal research has been done on potential age differences in gratitude. In this study, older and younger adults were compared on their experience, expression, and appraisals of gratitude. Based on the *broaden and build* model of positive emotions (Fredrickson, 1998) we expected older adults to have a larger number of enduring strategies and resources, enabling them to experience greater gratitude compared to younger adults. We also predicted that older adults would be more grateful for more intangible benefits whereas younger adults would be more grateful for materialistic gifts. Since gratitude requires recognition of benefits received, we also explored whether people with effortful thinking (or *need for cognition*) tended to experience more gratitude. Lastly, we examined whether older adults perceived gratitude as more pleasurable compared to younger adults. To test these hypotheses, we administered a battery of self-report questionnaires including dispositional measures of gratitude and *need for cognition* to 74 younger (18-25 years) and 51 older adults (60-85 years). Results showed that older adults were less likely to report about materialistic gifts compared to younger adults, both for the last seven days and entire life. (amishra2@gmu.edu)

BEATING THE ODDS: WHAT FACTORS LEAD TO THE ACADEMIC SUCCESS OF STUDENTS IN LOW-INCOME, URBAN HIGH SCHOOLS?

Samantha Hallman
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Research has consistently shown that there are significant disparities in education between Whites and minorities, most likely due to the fact that a large concentration of minority students is found in inner-city schools, where the quality of education is often low. These disparities continue into adulthood, as gaps in employment and income indicate. This in turn effects the next generation as the cycle of low socio-economic

status and poor education continues. Recent research has thus looked at various factors that contribute to the academic success, or lack thereof, of students in poor urban schools in order to identify ways in which the cycle can be broken. While most studies focus solely on low-achieving students, this study focuses on high-achieving students in order to see what factors may lead to academic resilience in adverse circumstances. Individuals that previously attended high school in a high-poverty, urban school district answered questionnaires pertaining to their high school experience and answers between high-achieving and high-low achieving students are compared. Results indicate that high-achievers were more likely to report that their father was involved with their academics, and that their teachers had a higher impact on their academics than non-achievers. Implications are discussed. (shallman@umich.edu)

EFFECTS OF VISUAL DISTRACTERS ON FACIAL RECOGNITION IN CHILDREN WITH AUTISM

Desiree Wilkinson & A. Rebecca Neal
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Previous research has found that individuals with autism have difficulty remembering faces; although the cause of this impairment is unknown, attention appears to moderate an individual with autism' performance on facial recognition tasks. To isolate the specific role that attention plays in facial recognition, performances for 15 children with autism, ages 7-11 and 15 typically developing children matched according to developmental age, were compared for two facial recognition tasks, one in which the facial stimuli appeared within a background and one in which the facial stimuli appeared within a blank screen. The order of the two tasks was counterbalanced. Although there is currently not enough data to draw any conclusions, the experiment will be completed by May 1. It is hypothesized that the results will show that children with autism are overall worse at facial recognition and that specifically, they are worse on facial recognition tasks when the facial stimuli appears within a background, because they find it more difficult to ignore the peripheral visual information.

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NARCISSISM, SELF-CONSTRUAL, FIELD-DEPENDENCE-INDEPENDENCE, AND BOUNDARIES OF THE SELF

Tyler Grove, Sara Konrath, & Brad Bushman
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The current study examined the relationship between narcissism and the constructs of self-construal, field-dependence-independence, and boundaries of the self. It was predicted that narcissism would be related to independent self-construal rather than interdependent self-construal, field-independence rather than field-dependence, and bodily, social, and spatial-symbolic boundaries of the self. Participants completed a questionnaire booklet with personality measures of narcissism, self-construal, and boundaries of the self. Participants also completed a test of field-dependence-independence. The results indicate that narcissism is positively related to independent self-construal and negatively related to interdependent self-construal. Narcissism is also positively related to field-independence when controlling for gender and unrelated to bodily, social, and spatial-symbolic boundaries of the self. Ultimately, the findings provide insight concerning narcissists' interpersonal and personal conceptions and narcissists' cognition style.
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PROBABILISTIC REASONING IN PRESCHOOLERS: RANDOM SAMPLES AND BASE RATES

Stephanie Denison & Fei Xu
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Recent research suggests that infants, children, and adults use statistical information to make inferences about the world. The present studies explored probabilistic reasoning in children aged 3;6 to 4;7. The first experiment asked whether preschoolers are capable of generalizing from small samples to larger populations. We presented children with a seemingly random sample of, e.g., dog bones— 5 yellow and 1 blue being pulled out of a box. We then asked him/her to choose between two boxes, one filled mostly with blue bones, the other with mostly yellow. The children answered correctly 74%

of the time, significantly different from chance of 50%, indicating that they are capable of reasoning based on rudimentary rules of probability. The second study asked whether children can make inferences in the converse direction. We began by showing them a population, a box filled with, e.g., mostly yellow dog bones, and then asked which of 2 samples (mostly yellow or mostly blue) were drawn from it. They were correct 70% of the time, also significantly different from chance of 50%. These results suggest that even young children use the random sampling assumption and base rate information in simple probabilistic reasoning tasks.
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MOTIVATIONAL LINKS AMONG IMPLICIT THEORIES, GOAL ORIENTATION, LAY DISPOSITIONISM, AND SOCIAL COMPARISON

Michael Chladek & Ronald S. Friedman
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According to Dweck & Leggett (1988), people tend to hold an implicit theory of people wherein personal characteristics are seen as either malleable (incremental theorist) or fixed (entity theorist). Furthermore, Dykman (1998) has extended Dweck's model from proving one's adequacy in specific areas to assessing one's self-worth through validation or growth. Evidence suggests that Dweck's model predicts lay dispositionism, the tendency to use traits as the basic means to analyze social perceptions (Chiu et al., 1997). The present study had three goals: (1) Does need for closure, need for structure, or causal uncertainty mediate the effects between implicit theories and/or goal orientation and lay dispositionism?; (2) Does need for structure mediate the relationship between contingent parental regard and implicit theories and/or goal orientation?; and, (3) Do validation seeking individuals demonstrate a greater proclivity to upwardly compare than growth seeking individuals? Results suggest that need for closure mediates goal orientation and lay dispositionism, whereas need for structure mediates implicit theories and lay dispositionism. The data did not support mediation between contingent parental regard and validation seeking or an entity theory. Both validation

and growth seeking were positively correlated with the propensity to socially compare.
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SIBLING CLOSENESS IN TWINS AND SIBLINGS

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Sibling relationships are unique bonds that may contribute to children's social and personality development. While most researchers have focused on rivalry, some sibling pairs may be close and supportive of each other. In addition, levels of closeness may be linked to other processes, such as sibling differentiation. The Twins, Adoptees, Peers, and Siblings (TAPS) project examines sibling socialization effects during middle childhood. The study includes 302 pairs of children, aged 8-11, in four dyad types: monozygotic twins, dizygotic twins, same-age adopted siblings, and full siblings who are close in age. It was predicted that DZ twins would exhibit lower levels of closeness compared to other pairs due to the differentiation process. It was expected that monozygotic twins would report high levels compared to others because of their behavioral similarity. A 2 (reporter) x 4 (dyad) mixed ANOVA revealed a significant effect for dyad type for children's self-reports of sibling closeness, $F(3, 249) = 14.86, p < .01$. There were no reporter effects. Results supported the hypothesis that monozygotic twins are closer than other sibling types. Adopted sibling pairs, not DZ twins, however, reported the lowest levels of closeness. Results will be discussed in relation to sibling differentiation theory.
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Linguistics Courtyard

THE DEVELOPMENT OF ALTRUISTIC PREFERENCE: A CROSS-CULTURAL STUDY

Andrew G. Shipley & William T. Harbaugh
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A developmental cross-cultural study was conducted in the United States and the Ecuadorian Amazon to measure youth preference for altruistic versus selfish

behavior. Rational Choice and Evolutionary Psychological models of human motivation and behavior predict individual maximization in social dilemma situations. This prediction has received repeated empirical challenge, demonstrating a wide range of preference for altruistic and selfish behavior varying significantly within and between cultures (Henrich et al 2001). No cross-cultural developmental research exists to explain this variation in adult behavior or to map the developmental trajectory of altruistic preference. In the current study, a mixture of decision and game theoretic tasks were used to assess the altruistic preference of children ages 6 to 14. Seeking to isolate degree of capitalist market integration, predictor variable often implicated in between cultures variance, the study included participants in Oregon public schools and participants in remote villages of the Shuar people of the Ecuadorian Amazon. Pending the completion of data analysis, this study will map the development of altruistic preference across an important maturational period. The question of starting-state universality in human altruistic preference will be explored and key periods of socialization and cultural divergence will be identified.
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EFFECTS OF RELIGIOUS COMMUNITY ON PERCEPTIONS OF ADULTHOOD

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Emerging adulthood as defined by Arnett (2000) is the life stage that occurs before achieving adulthood involving ages 18 to 25. Barry and Nelson (2005) examined the role of religious culture in emerging adulthood, and compared students from universities with a Catholic, Mormon, or secular affiliation. They found that students from the Mormon university valued external markers such as family capacity higher than the other two groups who were similar to one another, valuing internal markers such as independence. We did a similar study comparing students from a religious (Seattle Pacific University; SPU) and a secular (University of Washington) school. We hypothesized that criteria likely to be influenced by religious beliefs, such as norm

compliance, would be more highly valued by the SPU students. Criteria that were less likely to be affected by religious beliefs, like biological transitions, would not show group differences. Surveys assessing adulthood criteria and religiosity were distributed to 35 students on each campus. Results showed no significant differences in responses to the adulthood criteria questions between the two schools. However, some other interesting findings emerged that helped to illuminate what our sample participants thought about emerging adulthood. (younge2@spu.edu)

DOES LETTER-CASE INVARIANCE EMERGE WITH DEVELOPMENT? AN EXAMINATION OF PSEUDOWORD PRIMING IN 7-22 YEAR-OLDS
Rijuta Pandav, Nancy W. Lin, Sharon A. Ho, & Elyse L. Aurbach
Rice University

Normal adult readers easily recognize that upper and lower-case versions of the Roman alphabet belong to the same letter category despite their dissimilar forms (e.g. A, a). This "letter-case invariance" is one characteristic of reading expertise. One hypothesis argues that "letter-case invariance" emerges during development. Therefore, younger, less able readers should exhibit greater sensitivity to changes in letter-case than older, more able readers. Alternatively, since discriminating between different letter-cases is not useful for reading, it is possible that letters are learned in a case invariant manner initially. Therefore, readers of all ages and abilities should exhibit a similar lack of sensitivity to changes in letter-case. This study was designed to discriminate between these possibilities. Seven to 22 year-old subjects read aloud a list of pseudowords (e.g., "mape"). Some pseudowords had been presented earlier in the experiment in the same letter-case (same-letter-case primed); some in a different letter-case (different-letter-case primed); others had not been presented previously (unprimed). Sensitivity to changes in letter-case was measured as the difference between response-time scores for same and different-letter-case primed pseudowords. Results did not reveal an effect of age or reading ability in letter-case

sensitivity, suggesting that letters are learned in a case invariant manner initially. (rijuta@rice.edu)

THE LINKS BETWEEN SELF-ESTEEM AND RISKY SEXUAL BEHAVIOR FOLLOWING A BLOW OR A BOOST TO ONE'S FEELINGS OF SELF WORTH
Julia Shlyankevich & Jonathon D. Brown
University of Washington

Previous research has inconsistently linked low self-esteem with the tendency to make risky decisions regarding sexual behavior. We hypothesized that this is only the case when people with low self-esteem have experienced a boost to their feeling of self-worth (FOSW). After completing the Rosenberg Self-Esteem Scale, we manipulated participants' FOSW by giving them false feedback regarding their performance on a supposed measure of their intelligence. We then administered a questionnaire that indicated how likely they would be to engage in certain sexual risk behaviors. Participants with low self-esteem were more apt to make riskier decisions only after experiencing a boost to their FOSW, supporting our original hypothesis; feedback had no effect on the decisions that high self-esteem participants made. Results also indicated that while feedback had little effect on risk behaviors with a steady dating partner, people who succeeded were riskier with a casual acquaintance than those who failed. The relevance and implications of these findings suggest further research be done in this area to gain a better knowledge of how fluctuations in FOSW are linked to global self-esteem and sexual risk behavior. (Julias2@u.washington.edu)

IT'S ALL RELATIVE: CAN RELATIONSHIP EXPERIENCE CHANGE THE SHAPE OF DEPRESSION-RELATED BEHAVIORS?
Rashmi Singh, Marina Berns Kahana, & Daniel Stokols
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Multiple studies suggest that depressive symptoms manifest differently for males and females, with females exhibiting more affective symptoms, and males exhibiting more health compromising behaviors. In this study, we examined how positive and negative

experiences within relationships might explain differences in the association between depression and health behaviors (activity levels and diet) for males and females. Undergraduate students (N=511) completed measures assessing depressive symptoms, health-relevant behaviors and supportive/conflictual experiences in family and friendship relationships. Gender significantly moderated the association between depression and activity/diet behaviors. Though no relationship was found between depressive symptoms and exercise, depressive symptoms were related to sedentary behavior (TV/video games) among males only. Depressive symptoms were positively related to fast-food consumption across genders, but only females showed a negative relationship between depressive symptoms and fruit/vegetable consumption. In both genders, conflictual and supportive experiences were associated with depression in the predicted directions. However, only social support moderated the relationship between depressive symptoms and health behaviors. Surprisingly, supportive encounters positively affected levels of sedentary behavior, but only at sub-clinical levels of depression. This study suggests that while depressive symptoms are related to both health behaviors and social experiences, relationships may be limited in their ability to change depression-related behaviors.

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GENDER DIFFERENCES IN SPATIAL MEMORY OF A LARGE-SCALE ENVIRONMENT

Ann Ekechukwu
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Many studies have shown gender differences in cognitive tasks (e.g., male strength in navigation and female strength in object-location memory). However, these studies have frequently involved pencil-paper tests, not controlled experiments in large-scale spaces. In the present study we examined males' and females' memory for arbitrarily placed objects in a baseball field. Participants walked one of two straight paths through the field and learned the object locations. In a test phase, they imagined standing at one object and facing another object (the orientation); they then pointed with a joystick

to a third object. For both males and females, the orientations that yielded the highest performance depended on the learning path. However, males significantly outperformed females in all orientations. In a post-test questionnaire we found that experience playing baseball/softball was related to female but not male performance. Additionally, females reported relying primarily on egocentric learning (representing the objects with respect to one's body), while males reported forming a map representation of the field. Males' use of a map representation may have led them to perform well regardless of their experience playing the sport.
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GENETIC DISEASE DIAGNOSIS, COMMUNICATION, AND RELATIONSHIP SATISFACTION

Brittany Tinker
Seattle University

Research looking at communication in younger couples is lacking, as is research addressing genetic disorders and relationships. Because there is a lack of research in the area of genetic diseases and relationships, this study serves as preliminary research investigating the correlation between the diagnosis of a genetic disease and the communication and relationship satisfaction of couples. The subjects are between the ages of 18 and 29 and have a blood relative diagnosed with a genetic disorder. Participants completed questionnaires by logging on and submitting the questionnaires through an internet site. The study uses a mixed methods format, using a questionnaire with both quantitative and qualitative questions. To assess the overall lived experience of the couples, qualitative questions are used. The qualitative data will be evaluated using Content Analysis. To assess the communication and satisfaction in the relationship, the Dyadic Adjustment Scale (DAS) is used. A MANCOVA will be used to evaluate the DAS results. This study could have implications for practice in genetic counseling as well as in decisions for genetic testing.

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RECRUITMENT METHODOLOGIES: PARTICIPATION RATES IN RESEARCH ON SEXUAL ASSAULT

Samantha Abeling

California State University, Long Beach

Recruitment strategies are of particular concern for rape researchers who worry that participants who opt to participate in a study on rape differ from those who don't. To examine this possibility, the current study recruited participants using two study titles: Sexual Assault on Campus and Social Roles. All participants completed surveys assessing their perpetration and victimization status, levels of rape myth acceptance, and ability to correctly identify events as sexual assault. Results from a series of t-tests suggest that there are no significant differences between the two groups. This is good news for rape researchers because it shows no differences between respondents. Secondary goals of this study were to determine whether perpetrators had different levels of rape myth acceptance and masculinity. Results suggest that perpetrators are significantly more likely to believe that the victim *wanted it* and the perpetrator *didn't mean to*. Finally, the study sought to determine if victims are less likely to believe rape myths and better able to identify a situation as sexual assault. Results suggest that victims are significantly less likely to believe the myth that rape as a trivial event. Implications of these findings will be discussed.
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ASSOCIATIONS BETWEEN DISTRESS AND DISEASE PROGRESSION IN A SAMPLE OF HIV+ ADULTS

Hugo Santacruz

University of California, Los Angeles

Studies suggest that HIV+ individuals with higher levels of distress advance more rapidly to an AIDS diagnosis. Using a study assessing the effects of a Mindfulness-Based Stress Reduction (MBSR) program compared to a one-day mindfulness education seminar, we examined the relationships among psychological measures of distress and HIV disease progression at the baseline assessment. In the present sample of distressed HIV+ adults who are not currently on antiretroviral therapy, it was hypothesized that individuals with greater perceived stress and higher levels of distress would evidence lower

CD4 T-lymphocytes, a key measure of immune system decline. Findings from the study will provide stronger evidence of a relationship between distress and disease progression, which is vital when designing new behavioral therapies that could improve the lives of millions worldwide afflicted from this still fatal pandemic disease.

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EMOTION FACILITATES FORGETTING: RETRIEVAL INDUCED FORGETTING OF NEGATIVELY VALENCED EMOTIONAL WORDS AND A SELECTIVE MECHANISM INVOLVED IN MEMORY SUPPRESSION

Matthew Estrada

Stanford University

Many studies implicate the process of remembering itself as a mechanism of forgetting. Retrieval induced forgetting refers to the phenomenon whereby memory for target words sharing a cue will be differentially affected by the practice of half of the cue-target pairs following an initial study phase. Studies also demonstrate the fact that negative emotional memory traces perseverate in memory. This study used the retrieval induced forgetting paradigm to investigate the degree to which negatively valenced emotional words perseverate in memory versus neutrally valenced words. Ss (N=24) studied 15 categories, each consisting of one cue coupled with three neutrally and three negatively valenced target words (6 targets total). Following the study phase, Ss practiced retrieval using cued recall for 3 targets (either the neutrally valenced or the negatively valenced) of the total 6 for ten of the fifteen categories. A final recognition test revealed performance impairments as well as increased response times for unpracticed negatively valenced targets in practiced categories, supporting the theory that a mechanism for mnemonic suppression aids in memory selection and causes persisting forgetting effects.
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GENDER-SPECIFIC EFFECTS OF PRENATAL COCAINE EXPOSURE ON 5-HT_{2A} RECEPTORS IN ADULT RATS

Thomas Lycan

University of North Carolina, Chapel Hill

Abuse of the illegal stimulant cocaine (benzoylmethylecgonine, $C_{17}H_{21}NO_4$) is a major social problem in the United States today. The adverse effect of cocaine upon the prenatal environment has made it an important drug of investigation in the field of developmental psychobiology. The specific mechanisms by which cocaine affects the developing brain are for the most part unknown, including cocaine's effect on the rodent serotonin system (5-HT), a monoamine neurotransmitter that mediates a number of social and motor behaviors. At postnatal day (PND) 60, male rats with prenatal exposure to cocaine have been shown to demonstrate a gender-specific decrease in 5-HT_{1A} receptor levels that is accompanied by adverse behavioral effects. This experiment utilizes a quantitative Western blotting technique to investigate whether 5-HT_{2A} receptor levels are altered by prenatal cocaine exposure and if that effect is gender-specific or not. The findings of this experiment have indicated that prenatal cocaine exposure does not significantly alter 5-HT_{2A} receptors in either PND 60 male rats or PND 60 female rats. The dissimilarity of structure and function between the 5-HT_{1A} and 5-HT_{2A} receptor subtypes may partially explain the differing effects of prenatal cocaine exposure upon them. (tlycan@email.unc.edu)

IMMIGRATION AND NATIONAL IDENTITY

Robert Millie
Yale University

Our research studies the cross-cultural differences in national identity in the United States and Germany. This is especially relevant in light of the recent French riots in immigrant neighborhoods because our research indicates that simply copying an American assimilationist model may be counterproductive in Europe. We hypothesized that Germany has an exclusive national identity based on ethnicity, while America has an inclusive identity based on having affection toward America. To test this, subjects read a transcript of an interview with an immigrant and then completed the Fein & Spencer threat scale and a measure of identity inclusiveness. The immigrant either expressed genuine reasons for becoming a citizen (ex: I just feel like an

American) or practical reasons (ex: It makes travel easier). We hypothesized that Germans would be threatened by the genuine condition because it violates the exclusivity of the German identity. Conversely, Americans should be threatened by the practical condition because it violates the values of the American identity (essentially, loving America). Two studies supported these hypotheses. Additionally, we found that American subjects became more inclusive and German subjects became more exclusive when the immigrant displayed genuine reasons for citizenship. (robert.millie@yale.edu)

EFFECTS OF CHOICE OPTIONS ON THE BEHAVIOR IN PRESCHOOL STUDENTS

Jessi Ray & Jennifer Austin
California State University, Fresno

Many teachers struggle with finding effective strategies to manage problematic behaviors of the children they teach. Efforts to dispel inappropriate behaviors consume valuable and limited class time, thus creating a need for efficient strategies that are acceptable to the teacher. One method that has proven both practical and effective is the provision of choices, whereby students are allowed to choose among an array of tasks or activities. However, the existing literature has focused predominantly on the effects of choice provision on people with developmental disabilities. Few studies exist, however, which have applied this phenomenon to classroom settings comprised of children without disabilities, and even fewer examined the differential effects of various numbers of choice options as provided to preschool children. In efforts to expand on such findings, the present study examined the differential punishing effects of choice removal contingent on the inappropriate behavior of three typically developing preschool children. Three consequences of inappropriate behavior: verbal reprimand with provision of unlimited choice, verbal reprimand with provision of limited choice, and verbal reprimand with no provision of choice, were examined across participants in comparing relative rates of inappropriate behavior as allocated to each condition. (jessiray@csufresno.edu)

DRINKING EXPECTANCIES AND HEAVY ALCOHOL USE IN FEMALE COLLEGE ATHLETES: A ONE-YEAR LONGITUDINAL INVESTIGATION

Barrett Phillips, Talia Williams, & Byron L. Zamboanga
Smith College

Research with college students has shown that athletes report higher frequencies of heavy drinking and problematic alcohol use than non-athletes. Alcohol expectancies (anticipated effects of alcohol use) have been linked to drinking behaviors. However, prior research has focused primarily on expectancies and less attention has been given to the role of valuations (i.e., whether the effects are good or bad) of these expectancies on alcohol use. Researchers have also highlighted the importance of examining the link between expectancies and drinking in different contexts. It has been argued that, "although alcohol expectancies measure cognitive constructs, a social learning view suggests that they are also implicitly bound to situational factors" (O'Hare, 1997). Thus, one might hypothesize that expectancies will vary across different drinking contexts. We examined the influence of positive and negative expectancies and the valuations of these expectancies on the likelihood of excess use in different contexts (convivial, personal-intimate, negative coping) at two time points (baseline, 1-year later; cohort of 85 female college athletes). Results showed that positive expectancies *and* favorable valuations of these expectancies were associated with an increased likelihood of heavy use (but only in convivial and personal-intimate contexts) across time. Implications for theory/intervention efforts will be discussed.
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THE RELATIONSHIP BETWEEN HUMANISTIC VALIDATION AND GROUP COHESION, BELONGINGNESS, AND COMMITMENT IN STUDENT CLUBS

Rex Dulay
Seattle University

Previous studies have shown that participating in extracurricular activities in student clubs increases

cognitive skills, critical thinking and overall positive regard for the college experience (Gellin, 2003). Nevertheless, some students who do participate in these clubs eventually withdraw after a period of time because they do not feel a sense of belonging. However, techniques within humanistic psychology might address this issue of belongingness. The humanistic approach focuses in keeping in touch with the client's humanity and personal feelings. Espoused by the humanistic psychologist Carl Rogers, therapists are encouraged to give clients "unconditional positive regard" or *validate* clients' feelings, desires, and selfhood. Specific techniques such as active listening, calling a client by name and physical touch of the hands are just a few techniques practiced by humanistic therapists. Thus, a combination of these techniques (acknowledgement, active listening, saying participants' name) was applied by an experimenter to participants attending a hypothetical student club meeting. Participants who experienced the humanistic approach reported greater group commitment, cohesion, and belongingness to the hypothetical student club than participants who did not experience the humanistic approach. This study indicates that student club officers may benefit by applying humanistic validation techniques to enhance club members' participation to student organizations.
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GENDER DIFFERENCES IN THE EFFECTS OF SOCIAL CONTEXT ON EMOTIONAL RESPONDING

Yulia Chentsova-Dutton & Cheryl Hahn
Colby College

This study examines the effects of social cues on emotional responding of men and women. Literature suggests that emotional responses are influenced by the presence and expressiveness of other individuals. We examined whether social cues influence the experience of emotions differently for men and women. Gender differences in self-construal led us to expect that women would be more sensitive to emotional cues from other individuals. We examined this hypothesis by asking men and women to watch amusing and sad film clips. On a split screen, participants watched the films and the faces of inexpressive (neutral condition) and expressive

(expressive condition) individuals videotaped while watching the same films. Men reported experiencing similar levels of positive and negative emotions in the expressive and neutral conditions. In contrast, women reported experiencing more intense positive and negative emotions in response to the films in the neutral condition than in the expressive condition. These results suggest that women are more sensitive to expressiveness of other people when reacting to emotional stimuli. Women may allocate their attention to the social cues at the expense of attending to the actual emotional stimulus, resulting in a dampened emotional responding in the presence of emotionally expressive others.

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WHY CAN'T WE ALL AGREE? PERSONAL TEMPLATE DIFFERENCES AS AN EXPLANATION FOR INTER-RATER DISAGREEMENT

Michael Reding

Stanford University

When people speak about personality traits such as friendliness or trustworthiness, they expect that these traits have certain distinguishing features common to everybody. However, this assumption may not be correct. Prototype research has provided evidence that commonly used concepts vary in subjective meaning and central features across individuals. The current study explores how these individual differences affect peoples' judgments about others. First, participants provided *personal templates*, or what they thought were the most central features, for two common interpersonal traits: agreeableness and dominance. Next, those participants watched a series of videotaped interactions between two college students and ranked the actors on how dominant and agreeable they appeared. When participants were paired based on high or low personal template agreement for dominance and agreeableness, those who agreed very highly with each other also agreed highly with the group consensus (or *prototype*) for the trait. Individuals with similar templates for agreeableness also agreed better on the video ranking task than those with dissimilar templates, suggesting

that personal templates may affect judgments about others.

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Keynote Speaker: Carol Dweck, Ph.D.

Dr. Carol Dweck is Lewis and Virginia Eaton Professor of Psychology at Stanford University and a leading expert in social and developmental psychology. She graduated magna cum laude with honors in psychology at Barnard College at Columbia University and received her Ph.D. in Social and Developmental Psychology from Yale University. Professor Dweck's primary research interests include motivation, personality, and development. Her work bridges developmental psychology, social psychology, and personality psychology, and examines the self-conceptions people use to structure the self and guide their behavior. Dr. Dweck's research examines the origins of these self-conceptions, their role in motivation and self-regulation, and their impact on achievement and interpersonal processes.

Closing Speaker: Lera Boroditsky, Ph.D.

Lera Boroditsky is Assistant Professor in Psychology at Stanford University and Director of the Cognition Research Laboratory. She received a BA in Cognitive Science from Northwestern University and a PhD in Cognitive Psychology from Stanford University. Her primary research centers on the relationships between mind, world and language, including topics such as mental representation, metaphoric structuring, conceptual development, and conceptual change. Some of her recent endeavors have examined the acquisition of language and meaning, cross-linguistic similarities and differences in thought, and interrelationships between language, cognition, and perception. She has received such honors as the National Science Foundation Career Award and the Searle Scholars Award.

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Many Thanks to Our Reviewers!

**This year we received more project submissions
than ever before, so the following students volunteered
their time to read and score over 130 abstracts:**

Jamila Amarshi
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Information on SPEP Award and Award Recipients

Stanford Psychology Education Program (SPEP) Award

One of the primary goals of our conference is to foster the continued dialogue and influence of psychology through increased interaction and involvement in the larger psychology community. In that light, this year we have welcomed high school students from six local schools to attend and participate in the exchange of ideas that occurs during the conference. Additionally, each year we select a different psychology-related educational program in the area to which we donate conference proceeds. In the past, we have financed high school students on a trip to the annual meeting of the Western Psychological Association, supported East Palo Alto High School's humanities program, aided Gateway High School, and donated money to the California Psychology Internship Council (CAPIC), an organization that promotes psychology internship training and service in California.

This is the first year for which there has been an application process to obtain the grant provided by SUPC, which included a proposed budget for the funds. The Sixth Annual Stanford Undergraduate Psychology Conference is honored to announce that it has chosen South San Francisco High School from its pool of applicants to receive the first-ever Stanford Psychology Education Program (SPEP) award.

South San Francisco High School

With an enrolled population of over 1,500 students, South San Francisco High School is medium-sized public school with an incredibly diverse student body. Many of the families in the area are recent immigrants of lower socio-economic standing. A variety of ethnic groups is represented on campus, including Latino (42%), Filipino (21%), Caucasian (17%), Chinese/Japanese (11%), African-American (5%), and Pacific Islander (4%).

Due to lack of textbooks, only one class of thirty students can take the psychology course every semester. In addition, the school lacks the resources to purchase valuable videos and other materials to learn about research studies. In light of this, the psychology program at South San Francisco High School proposes to use the grant to attain the necessary course materials to expand the psychology course and offer more students the opportunity to study psychology.

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