# The Inaugural

# Stanford Undergraduate Psychology Conference

Saturday, May 19th, 2001 Jordan Hall, Stanford University



Sponsored by the Stanford chapter of Psi Chi and the Stanford Undergraduate Psychology Association

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# STANFORD UNIVERSITY STANFORD, CALIFORNIA 94305-2130

DEPARTMENT OF PSYCHOLOGY Jordan Hall, Bldg. 420

May 19, 2001

Dear Presenters, Faculty, and Guests:

It is with great pleasure that I welcome you to the first ever Stanford Undergraduate Psychology Conference (SUPC). The purpose of this forum is broad and extends much beyond simply having undergraduates present their research. Rather, our goal is to make psychology come alive.

As a recent undergraduate myself, I understand the potential impact of meeting a prominent professor. Today, we have arranged for you to meet and talk with some of the best. The Department of Psychology at Stanford has been at the top of its game for the past 40 years and now, I invite you to question, listen to, and probe the distinguished professors who are responsible for that time-honored reputation.

Importantly, however, our purpose goes far beyond simply introducing undergrads to faculty members. Indeed, another primary goal of this conference is to touch the lives of high school students, most of who would not otherwise have this opportunity. All too often, the study of psychology is limited to the privileged. In the words of psychologist George A. Miller, one of our goals today is to "give psychology away."

When I began planning this event back in May of 2000, the goal was to get at least 30 people to attend. It seems that we have blown the doors off of that estimate. Of the 220 registered attendees, 73 are presenters and 147 are spectators. Twenty-seven schools are represented, as well as six states and four countries. One person even traveled 7093.9 miles to attend the conference.

As is the case with most inventions, our limited scope of reference renders us incapable of accurately gauging the ongoing influence that this conference will have. Let me suggest, though, that by supporting this event, you are investing in tomorrow's teachers, researchers, and policymakers. Psychology is a discipline that touches all people; today, we are helping to invigorate those who will administer that touch.

Sincerely yours,

George M. Slavich

Founder and Executive Director, SUPC



#### STANFORD UNIVERSITY DEPARTMENT OF PSYCHOLOGY

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

May 19, 2001

Dear Participants,

It is a great pleasure to welcome you, on behalf of Stanford University and the Department of Psychology to the First Ever Stanford Undergraduate Psychology Conference – brought to you through the extraordinary efforts of George Slavich and his colleagues in the Stanford Chapter of Psi Chi. We are delighted that you have come to join us in this venture.

For years, I have believed that the single best thing that we can do to improve undergraduate education in psychology is to get more students involved in their own research projects. Certainly, when I was a student here a zillion years ago, the opportunity to do independent research – to pursue my own ideas, to replace speculation with evidence, and to contribute to our collective endeavor – was the highlight of my own undergraduate program. To this day, I remember the excitement and the details of that project.

Indeed, the only thing lacking in my era was the opportunity that you all have today, to present and discuss the results of your research with other interested students. (Had there been such an opportunity, I might have learned in time that the article I eventually published on my study should <u>not</u> have been titled "An Experimental Analysis of the Factors Determining the Obedience of Four-Year-Old Children to Adult Females," a paper that no one ever read, but something more informative and interesting like "Why Don't Young Children Obey Their Own Mothers?")

Like many others interested in education over the years, I believe that we learn best when we are actively involved in meaningful projects of our own design. In the West, for example, philosophers from Froebel to Dewey to Whitehead have long promoted research involvement as an antidote to the accumulation of "inert facts" that we so often stockpile the day before an exam and forget the day after. In the East, this same point is made in the ancient Chinese aphorism: I hear and I learn; I see and I remember; I do and I understand.

So please seize and enjoy the day, as you share with us what you have learned, remembered, and understood in the course of your research. Good luck to each of you, and thanks again for joining us today.

Sincerely,

Mark R. Lepper

Professor and Chairman

Mark R. Sur

#### Schedule of Events

Time Event Name Location

8:30-9:00 **Registration** Front Lobby

9:05-9:20 **Introductory Address** 420-040

Introductory addresses by Mark R. Lepper, Chair of the Department of Psychology, and George M. Slavich, Founder and Executive Director of the Stanford Undergraduate Psychology Conference.

9:30-11:20 Paper Session A: 380-x

Learning/Memory/Cognition

Sensory Flashbulb Memory: A Comparative Account Between Public and Private Events CHRISTIE PETER LINN, George Fox University

#### The Effects of Accurate and Entertaining Retellings on Memory

NICOLE DUDUKOVIC, BARBARA TVERSKY, and ELIZABETH MARSH, Stanford University

#### The Effect of Grammatical Gender on Similarity

WEBB PHILLIPS and LERA BORODITSKY, Stanford University

#### Language affects memory, but does it affect perception?

MICHAEL C. FRANK and LERA BORODITSKY, Stanford University

#### Mental Rotation Among Adults of Varying Proficiencies: An fMRI Study

JENNIFER J. BURROWS, AMY L. SHELTON and JOHN D. E. GABRIELI, Stanford University

9:30-11:20 Paper Session B: 380-y.
Social

#### Credibility and Attractiveness as a Function of Persuasive Influence

D. DAVID BARNARD, JULIE PAPPAS, MARABEL VENEGAS, and LYNNETTE ZELEZNEY Ph.D., California State University, Fresno

#### The Power of Reciprocity Influences Anti-Social Behavior

CHRISTINA M. MADRID, Woodbury University

#### Gender Stereotypes of Various Ethnic Groups

MEGUMI HOSODA, DIANA R. GALLEGOS, and TERESA SACKS, San Jose State University

# Attitudes Toward Homosexuality Among Heterosexual Asians, Blacks, Latinos, and Whites

NHAN L. TRUONG, University of California, Davis

The Malleability of Biracial Identity: Implications for Stereotype Threat ANTHEA KELSICK and SARAH TOWNSEND, Stanford University

9:30-11:20 **Paper Session C:** 

380-w

Developmental

**Dual Diagnosis and Children with Developmental Delays**STEFANIE T. GREENBERG, University of California, Los Angeles

Comparison in Word Meaning Acquisition with Children in Hong Kong JOYCE K. KWOK, University of Southern California

Do Infants Learn Isolated Words More Easily than Embedded Words? ALYCIA CUMMINGS and ANNE FERNALD, Stanford University

The Role of Gender Schema on Children's Emotional Experiences and Attributions REBECCA BOLNICK, Sonoma State University

Understanding the Development of Children's Mental Rotation Ability: An fMRI Study KRISTA B. PELISARI, AMY L. SHELTON, MORIAH THOMASON, and JOHN D. E. GABRIELI, Stanford University

11:30-12:30 Keynote Address by Robert Cialdini, Ph.D. 420-040 "Using the Science of Influence to Improve the Art of Persuasion"

12:30-1:30 Lunch

see registration information for your location

Lunch with Stanford faculty members.

1:45-3:05 **Paper Session D:** 

420-050

Social/Women/Community

The Effect of Tokenism on the Possible Selves of Stigmatized Individuals ADRIAN AGUILERA, Stanford University

#### **Comparison-Induced Body Distortions**

GIA M. HOVANNISIAN and JESSICA M. CHOPLIN, University of California, Los Angeles

#### **Body Image and the Media**

TRACI MANN, KELLI GARCIA, and YVETTE SERRATO, University of California, Los Angeles

#### The Stress Response in Eating Disorders

SAMANTHA P. MILLER and HANS STEINER, Stanford University

1:45-3:05 **Paper Session E:** 

380-x

Educational/School

Ease of Falsification of ADHD Diagnosis Using Diagnostic Batteries

GINA JACHIMOWICZ, University of California, Los Angeles

The Role of Teachers in Psychological Referrals

CHRISTOPHER L. WILLIAMS, California State University, Fresno

Peer Victimization, Friendships, and Adjustment among Middle School African-American and Latino Girls

VERONICA GARCIA, University of California, Los Angeles

Perfectionism, Emotion Regulation, and Adjustment to Freshman Year

TAI M. LOCKSPEISER, Stanford University

1:45-3:05 **Paper Session F:** 

380-у

Clinical/Psychopathology

Memory for Emotional Pictures: A Socioemotional Analysis of the Acquisition of S.C.I. H'SIEN HAYWARD, Stanford University, MARA MATHER, University of California, Santa Cruz, SUSAN TURK-CHARLES, University of California, Irvine, and LAURA L. CARSTENSEN, Ph.D., Stanford University

Information-Processing Biases in Obsessive-Compulsive Disorder

JENNIFER YEH, SASKIA TRAILL, and IAN H. GOTLIB, Stanford University

Cortisol, Cognitive Bias, and Rumination in Depression

SARAH MASCARENAS, Stanford University

The Role of Stressful Life Events and Cognitive Biases in Depression

GEORGE M. SLAVICH, IAN H. GOTLIB, Stanford University, and SCOTT M. MONROE, University of Oregon

1:45-3:05 **Paper Session G:** 

380-w

Law/Community/Health

Attitudes and Perceptions Toward Hate Crime Perpetrators and Victims MARGARET R. MENDOZA, NADINE RECKER, M.A., and GERALD C. DAVISON, Ph.D., University of Southern California

# The Development of Trust Among Virtual Team Members from Different Organizational Cultures

JENNIFER A. MANUEL, University of Southern California

#### A Clinic-Based Survey of Health Beliefs and Sexual Risk Behavior in Kenya

JONATHAN E. VOLK and CHERYL KOOPMAN, Stanford University

# College Students' Intentions to Use Condoms: An Augmented Theory of Planned Behavior

SHANNON CERNEK, University of California, Davis

#### 3:15-4:10 Poster Sessions

Courtyard A and Courtyard B

#### Courtyard A

# What Does it Mean to Become a Programmer? A Longitudinal Analysis of Identity Development in Young Software Designers

MERIDITH G. ROBERTS, University of California, Los Angeles

#### Predictors of Early Reading Skills Prior to Formal Schooling

LISA CHON, CHARRYSE FOUQUETTE, REBECCA GAFFNEY-BROWN, WENDI JORDAN, KRISTIN MAHANEY, and ELVA RIOS, Loyola Marymount University

# Imagining Faces Versus Houses in Children: A Functional Magnetic Resonance Imaging Study

JENNIE PARK, University of Washington

The Disruption of Directed Forgetting: The Case for Reduced Competition EDWARD T. COKELY, BERTA GARCIA, NICOLE MACDONALD, and MITCHEL CASADOS, California State University, Fresno

#### Implicit Learning Under Single and Dual Task Conditions

MARKUS H. DRESSEL, TEENA MOODY, and BARBARA KNOWLTON, University of California, Los Angeles

# Delayed Conditioned Taste Aversion Learning in Rats is Mediated by Sex Hormones DYAN ZIMMERMAN, DEAUNTE THOMPSON, ELVA RIOS, SHITAL PAVAWALLA, GIANNA LAIOLA, JESSICA HAYES, MICHELLE HAGEN, KEVIN AELING and MICHAEL FOY, Loyola Marymount University

#### The Effects of Scopolamine on Trace Fear Conditioning

Q. D. MA, J. J. QUINN, and M. S. FANSELOW, University of California, Los Angeles

#### The Effects of Anticipatory Anxiety and Self Efficacy on Fear

CLAUDETTE BANDA, CHRIS ANDERSSON, and JAYSON MYSTKOWSKI, University of California, Los Angeles

# The Relationship of Post-Traumatic Stress Disorder to Self-Mutilation in Borderline Personality Disorder

ONA ANICELLO, University of Washington

# Memories of the Intensive Care Unit Following Acute Respiratory Distress Syndrome MICHAEL J. LARSON and RAMONA O. HOPKINS, Brigham Young University, LINDELL

K. WEAVER, Department of Critical Care Medicine, LDS Hospital

#### Courtyard B

#### **Perceptions of Political Labels**

ELIZABETH STEVENS, LISA FARWELL, Ph.D. and BERNARD WEINER, Ph.D., University of California, Los Angeles

# Heterocentrism and Heterosexism in Heterosexual College Students' Perception of Bisexuality and Heterosexuality

SHAGHAYEGH HABIBI, Woodbury University

# Ethic Identity Bifurcation Induced by Stereotype Threat in High Achieving Persons of Mexican Decent

YENDA PRADO, VALERIE J. PURDIE, and CLAUDE M. STEELE, Stanford University

# Being "Chinese" and Being "American": A Study on Chinese Americans' Ethnic Identity, Acculturation, Attitudes, and Cultural Orientation

ALBERT TSZ HUNG YU, and FAYE J. CROSBY, University of California, Santa Cruz

# Individual and Collective Self-Esteem as Predictors of Latino Acculturation and Academic Success

ZOE GILLISPIE, Scripps College

#### **Predictors of Marital Satisfaction Among Interracial Couples**

CAROLYN MARQUEZ and DR. JEAN PEACOCK, California State University, San Bernardino

# The Birth-Order Effects Controversy: Within-Family Effects and Their Generalizability MANCHI CHAO, University of California, Berkeley

# Relationships Between Age at Immigration and Body Image Among Asian American Adolescents

SHIRLEY BAEK, University of California, Davis

#### A Cross-Cultural Investigation of the Ideal Female Body Portrayed by the Media

JESSIE MCKELVEY, Arizona State University West

#### Cognitive Consequences of Body Image and Adolescent Depression

GRETA KLEVGARD, Stanford University

# Depression and Divorce: A Feminist Social Constructionist Approach to Women's Adult Development

JESSICA T. BARNES, University of California, Berkeley

#### Psychological Abuse in Young Adult Romantic Relationships

VERONICA PADILLA, HEIDI SIVERS, and ALBERT BANDURA, Stanford University

#### Parental Rearing Behavior and Children's Anxiety

LINDA TSENG, JEFF WOOD and MARIAN SIGMAN, University of California, Los Angeles

#### Affective Forecasting and Anxiety

DAISY GREWAL, University of California, Los Angeles

#### Early Developmental Patterns of Aggression

JESSICA BRAUNER, Yale University

#### The Effects of Time Delay and Reminder on the Door-in-the-Face Technique

JANNA FONG, WAKIZA GAMEZ, DIANA MARCHETTI, and PEGGY SHEN, Santa Clara University

#### The Effects of Gender and Authority Type in the Organization on Compliance

CYNTHIA L. OWENS, Arizona State University West

4:20-5:00 Talk by Scott Fraser, Ph.D.

420-041

"Justice and Just a B.S. (degree)"

4:20-5:00 Talk by Chris Koch, Ph.D.

380-C

"Building a Successful Psi Chi Chapter"

#### 5:10-5:30 High School Presentation

420-040

A class of talented psychology students from South San Francisco High School will make a surprise presentation.

#### 5:30-5:45 **Conclusion**

420-040

Conclusion by **George M. Slavich**, Founder and Executive Director of the Stanford Undergraduate Psychology Conference.

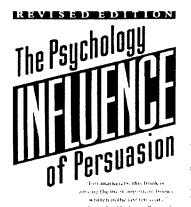
#### 5:45-6:00 Snacks/Mingle

Courtyard B

Eat some food and mingle with the people you didn't get a chance to talk to all day.

# Keynote Speaker

Robert B. Cialdini, Ph.D.



"Using the Science of Influence to Improve the Art of Persuasion"

It is through the influence process that we generate and manage change. Like most things, the process can be handled poorly or well. It can be employed to foster growth and to move people away from negative choices and in more positive directions, thereby creating the conditions for new change opportunities. Or, it can be used clumsily, reducing the chance for genuine movement and, in the worst of cases, boomeranging into conflict and resentment.

As such, it is important for those wishing to create and sustain practical change to understand fully the workings of the influence process. Fortunately, a vast body of scientific evidence now exists on how, when, and why people say yes to influence attempts. In his presentation, Dr. Cialdini will extract from this formidable body of work the six universal principles of influence—those that are so powerful that they generate desirable change in the widest range of circumstances.

Robert B. Cialdini received undergraduate, graduate, and postgraduate education in Psychology at the University of Wisconsin, the University of North Carolina and Columbia University, respectively. He has held Visiting Scholar appointments at Ohio State University, the Universities of California at San Diego and Santa Cruz, the Annenberg School of Communications, and at both the Psychology Department and the Graduate School of Business of Stanford University. He is Regents' Professor of Psychology at Arizona State University, where he has also been named Distinguished Graduate Research Professor. He has been elected president of the Society of Personality and Social Psychology and of the Personality and Social Psychology Division of the American Psychological Association. Currently, he is Visiting Professor of Marketing at Stanford University's Graduate School of Business.

#### **Invited Talks**

#### Scott Fraser

"Justice and Just a B.S. (degree)"

What can you do with just a bachelor's degree in psychology or a related social science? What type of career opportunities exist for students who want to be involved in an endeavor related to their major interests without first attaining advanced degrees? What tactics are more likely to gain you access to employment where your university education will be integral to the required job skills?

Dr. Fraser will offer answers to these questions by exploring the situation in a single domain: the American jurisprudence system. He will explore specific examples illustrative of the type of considerations anyone should make in choosing career avenues to pursue. The multifaceted nature of our legal system and all its associated agencies provide an intriguing example of an employment arena with extraordinary opportunities for individuals without the usual and customary credentials. The techniques to crack this field's shell to see what really transpires inside, to identify the needs that typically go begging, and to get your moniker on the marquis are not unique to our justice system. They are the same strategies anyone will want to implement in securing a job and developing a career where her or his university learning will be applied.

#### **Chris Koch**

#### "Building a Successful Psi Chi Chapter"

This talk overviews the purpose and programs of Psi Chi. Recent research on high and low functioning Psi Chi chapters will also be presented to characterize the reasons why students become Psi Chi members and to provide examples of successful chapter activities. The talk will end with a brief brainstorming session on how to improve both the national Psi Chi programs and local chapter involvement.

# F

#### **Albert Bandura**

David Starr Jordan Professor of Social Science in Psychology. Ph.D. Psychology, University of Iowa (1952). Analysis of basic mechanisms of personal agency through which people exercise control over their level of functioning and events that affect their lives. One line of research is concerned with how people regulate their own motivation, thought patterns, affective states and behavior through beliefs of personal and collective efficacy. A second line of research examines the paramount role of self-regulatory mechanisms relying on internal standards and self-influence in human adaptation and change. These mechanisms are studied in the areas of sociocognitive development, affect regulation, health promotion and disease prevention, organizational functioning, and collective action for social change. Dr. Bandura has held posts that include President of the American Psychological Association (1974), APA Board of Directors (1972-76, Chair, 1974), APA Committee on Constitutional Issues (1975-77), Trustee for American Psychological Foundation, (1975-82), Western Psychological Association Board of Directors (1979-82, Chair, 1982), WPA President (1980), and U.S. National Committee for the International Union of Psychological Sciences (1985-1993).

#### Robert B. Cialdini

Robert B. Cialdini received undergraduate, graduate, and postgraduate education in Psychology at the University of Wisconsin, the University of North Carolina and Columbia University, respectively. He has held Visiting Scholar appointments at Ohio State University, the Universities of California at San Diego and Santa Cruz, the Annenberg School of Communications, and at both the Psychology Department and the Graduate School of Business of Stanford University. He is Regents' Professor of Psychology at Arizona State University, where he has also been named Distinguished Graduate Research Professor. He has been elected president of the Society of Personality and Social Psychology and of the Personality and Social Psychology Division of the American Psychological Association. Currently, he is Visiting Professor of Marketing at Stanford University's Graduate School of Business.

#### John H. Flavell

Anne T. and Robert M. Bass Professor in the School of Humanities and Sciences. Ph.D. Psychology, Clark University, 1955. Theoretical and experimental work on cognitive growth in children. The development of children's knowledge about the mind.

#### **Scott Fraser**

Dr. Fraser graduated from Stanford University with a B.A. in psychology. He received a Ph.D. in psychology in the experimental social psychology program at New York University and completed a two-year post-doctoral internship in neurophysiology and neuropsychology at The Hospital of the Good Samaritan in Los Angeles, California. Currently, Dr. Fraser is a professor at Pacific Western University and the Institute of Psychiatry, Law, and the Behavioral Sciences at the University of Southern California Medical School. He is also the Chief Executive Officer of the Neuropsychology Foundation, a Senior Associate at Applied Research Associates, and a Director of the Western Child Welfare Law Center.

#### John D. E. Gabrieli

John D. E. Gabrieli, Ph.D., is an Associate Professor in Psychology, in the Neurosciences Program, and in Radiology at Stanford University. He received a B.A. in English from Yale (1978), a Ph.D. in Behavioral Neuroscience from the Department of Brain and Cognitive Sciences at MIT (1987), and was a postdoctoral fellow in Harvard's Psychology Department. His area of research is human cognitive neuroscience in which he studies the brain basis of memory, language, and thought. In the past five years, a focus of his research has been the use of functional magnetic resonance imaging (fMRI) to visualize the neural basis of mental operations. In 1996 he received the American Psychological Association Division 40 Robert A. and Phyllis Levitt Early Career Award in Neuropsychology.

#### James J. Gross

Dr. Gross received his B.A. in Philosophy and Psychology from Yale University, summa cum laude in 1987, and his Ph.D. in Clinical Psychology from University of California at Berkeley in 1993. Dr. Gross has been an Assistant Professor in the Stanford Psychology Department since 1994. Dr. Gross has published extensively in the area of emotion and emotion regulation, and currently has a grant from the NIH to study the affective, cognitive, and social consequences of emotion regulation. Dr. Gross has received a number of awards for his research and teaching, including the Dean's Award for Distinguished Teaching at Stanford University.

#### **Lynne Henderson**

Lynne Henderson, Ph.D., is Director of the Shyness Clinic and Co-Director of the Shyness Institute, the first non-profit to study shyness. She is currently studying shyness, emotion regulation, social cognition in interpersonal relationships and the use of technology in adolescence. Dr. Henderson is a visiting scholar at Stanford University, a consulting clinical faculty member in Counseling Psychology at Stanford, and a principal at Rivendel Consulting & Design, Inc., where she consults with Fortune 500 companies. Her training includes a fellowship at the Stanford University Health Center and internships at Stanford Psychiatry and the Menlo Park Veterans Administration Hospital. Publications include numerous conference presentations, several book chapters, and articles related to personality variables in shyness. She is currently working on a Social Fitness Training Manual.

#### **Chris Koch**

Chris Koch received his bachelors of science degree from Penn State University with honors in psychology. He received both his masters degree in Experimental Psychology and doctoral degree in Cognitive-Experimental Psychology from the University of Georgia. Dr. Koch is currently an Associate Professor of Psychology at George Fox University where he has served as the Director of Undergraduate Psychology and Director of Scholarship. He has also served as a Councilor for the Psychology Division of the Council on Undergraduate Research and is currently serving his second term as Vice-President of Psi Chi for the Western Region. Dr. Koch will be teaching and conducting research in Russia this fall as a Fulbright Scholar to Omsk State University.

# F G

#### Mark R. Lepper

Professor and, by courtesy, in the School of Education. Ph.D. Social and Developmental Psychology, Yale University, 1971. Strategies and techniques of expert tutors: Motivational and cognitive processes. Microcomputers in education: Effects of educational programs on children's intrinsic motivation and learning. Intrinsic vs. extrinsic motivation: Detrimental effects of superfluous social controls and strategies for enhancing intrinsic interest. Choice and its consequences: Cultural and situational differences. Social cognition and attribution processes: Attributional biases and inferential errors. Social and moral development.

#### Eleanor E. Maccoby

Eleanor E. Maccoby received her Ph.D. in Psychology from the University of Michigan in 1950. She taught at Harvard for a number of years before coming to Stanford University in 1958. Since that time she has been a professor of developmental psychology (now emerita) and chaired the Stanford Psychology Department from 1973-1976. Her writings include Patterns of Child Rearing (1957, with Sears and Levin); The Psychology of Sex Differences (1974, with Carol Jacklin); Social Development (1980); Dividing the Child: The Social and Legal Dilemmas of Custody (1992, with Robert Mnookin); The Two Sexes: Growing up Apart, Coming Together (1998); and numerous papers and chapters on parent-child interaction, on gender differentiation in development, and on family organization and disorganization. She has received awards for distinguished scientific contributions from the American Psychological Association, the Society for Research in Child Development, and the American Educational Research Association, is a member of the American Academy of Arts and Sciences, and was elected to the National Academy of Sciences in 1993.

#### Ellen M. Markman

Professor. Ph.D. Developmental Psychology, University of Pennsylvania, 1973. Cognitive and language development, especially, early lexical acquisition, conceptual organization, categorization, and inductive reasoning in children and infants.

#### Lee D. Ross

Professor. Ph.D. Social Psychology, Columbia University, 1969. Attributional processes and biases. Strategies and shortcomings in lay judgment and decision making. Basis of (and biases in) knowledge about self and others; egocentrism and "naive realism." Sources of interpersonal and intergroup conflict. Barriers to conflict resolution and techniques for overcoming such barriers.

# F

#### Claude M. Steele

Claude Steele has been a professor of psychology at Stanford University since 1991, and before that served on the faculties of the University of Michigan, the University of Washington, and the University of Utah. His research interests are in three areas: First, processes of self-evaluation, in particular in how people cope with self-image threat. A second interest, growing out of the first, is a theory of how group stereotypes can influence intellectual performance and academic identities. Third, he has also studied addictive behaviors, particularly alcohol addiction. He received his B.A. degree from Hiram College (Hiram, Ohio) and his Ph.D. degree in psychology from The Ohio State University in 1971. He is President-Elect of the Society for Personality and Social Psychology, and has served as President of the Western Psychological Association, as Chair of the Executive Committee of the Society of Experimental Social Psychology, as a member of the Board of Directors of the American Psychological Society, and on the editorial boards of numerous journals and study sections at both the National Institute of Mental Health and the National Institute of Alcoholism and Alcohol Abuse. He is a Fellow of the APS and the APA, a member of the American Academy of Arts and Sciences and the National Academy of Education, and is the recipient of a Cattell Faculty Fellowship from the Cattell Foundation and the 1996 Gordon Allport Intergroup Relations Prize. He currently holds an endowed chair as Lucie Stern Professor in the Social Sciences, and is Past-Chair of the Psychology Department, at Stanford University.

#### Robert B. Zajonc

Professor. Ph.D. Psychology, University of Michigan, 1955. Basic processes implicated in social behavior, with a special emphasis on the interface between affect and cognition. In a series of studies, circumstances are examined under which affective influences can take place in the absence of cognitive contributions. The nature of these influences are compared for individuals who are either aware or unaware of changes in their affective states.

#### **Stanford University:**

- 15 Nobel laureates
- 4 Pulitzer Prize winners
- 1 winner of the Congressional Medal of Honor
- 22 MacArthur Fellows
- 21 recipients of the National Medal of Science
- 3 National Medal of Technology recipients
- 222 members of the American Academy of Arts and Sciences
- 126 members of the National Academy of Sciences
- 79 National Academy of Engineering members
- 26 members of the National Academy of Education
- 41 American Philosophical Society members
- 6 winners of Wolf Foundation Prize for Mathematics
- 6 winners of the Koret Foundation Prize
- 2 Presidential Medal of Freedom winners

# **Paper Session A**

# SENSORY FLASHBULB MEMORY: A COMPARATIVE ACCOUNT BETWEEN PUBLIC AND PRIVATE EVENTS

Christie Peter Linn (George Fox University)

The following research study examines the comparison between public and private event flashbulb memories with relevance to sensory details. Subjects were asked questions involving visual, auditory, tactile, taste and kinesthetic details about particular shared private and public events. The hypothesis is that there are significant differences of flashbulb sensory recalled details between private events and public events. Fewer details were remembered for the public event than for the private event. The mean score for the private event was 7.8 compared to the mean of the public event, of only 1.4. From the calculations, we are 99% confidant that sensory detail is remembered for private event flashbulb memories than for public event flashbulb memories. The sample size in this study consisted of a family with two adults and two adolescents. The private event was the sudden death of the family dog. The public event was the day after the election when they realized the presidential candidacy was changed and will go to the courts. The integration and statistical results of the recent West Coast earthquake into this study are in progress.

e-mail: cplinn@georgefox.edu

#### THE EFFECTS OF ACCURATE AND ENTERTAINING RETELLINGS ON MEMORY

Nicole Dudukovic, Barbara Tversky, & Elizabeth Marsh (Stanford University)

When people retell events, they often focus on entertaining their audience rather than on accuracy. The current research investigated how repeated retellings of a prose passage affected memory when the retellings were guided by an entertainment goal versus an accuracy goal. Participants read a story, then either retold it three times or not at all. By instruction, retellings were either entertaining or accurate. Four days after reading the story, all participants were tested on their memory for the story. Participants who retold the story with an accuracy goal recalled the greatest number of story events, and their recall was more accurate and detailed and less exaggerated. There were no significant differences on the recognition memory measures among the three groups. Entertaining retellings are guided by goal-oriented schemas, which affect the retrieval structures that participants later generate and use on free recall but not on recognition tasks. Thus, the creative process of retelling a story leads to qualitative and quantitative changes when later recalling the original story.

e-mail: nicoled@psych.stanford.edu

#### THE EFFECT OF GRAMATICAL GENDER ON SIMILARITY

Webb Phillips & Lera Boroditsky (Stanford University)

Grammatical gender has long been thought to have no influence on the meanings of words. But previous research showed that native speakers of German and Spanish ascribe different properties to objects depending on the grammatical gender of the objects. To counter alternative explanations, we performed two additional studies. In the first, English speakers learn a grammatical gender system and

find that objects are more similar to people of the same gender. In the second, Spanish and German speakers do the same task as the English speakers and show the same effect. We argue that this effect is a result of the influence of language on the mind.

e-mail: webb@stanford.edu

#### LANGUAGE AFFECTS MEMORY, BUT DOES IT AFFECT PERCEPTION?

Michael C. Frank & Lera Boroditsky (Stanford University)

Articles by Davidoff et al. (1999) and Goldstone (1994) claim that linguistically learned categories can affect the way people perceive colors and shapes. Yet these studies are based on tests of memory, rather than perception. In our study, we teach some subjects two new color words, one for light blue and one for dark blue, while other subjects perform an equivalent, non-categorizing task. We then examine both groups' accuracy at judging whether two colors are the same or different, specifically examining trials where one color is in the light blue category and one in the dark blue category. In these cross-category trials, the subjects who have learned the new color words answer correctly more often if we present the two colors with a three-second delay between them. However, when we show the two colors at the same time, accuracy for all subjects remains the same for these trials as for others. This result suggests that we should take more care in distinguishing memory and perception when we make claims about language affecting thought.

e-mail: mcfrank@stanford.edu

# MENTAL ROTATION AMONG ADULTS OF VARYING PROFICIENCIES: AN FMRI STUDY

Jennifer J. Burrows, Amy L. Shelton, & John D. E. Gabrieli (Stanford University)

Mental Rotation is the ability to rotate images in one's mind. Since Shepard and Metzler (1971) pioneered studies of mental rotation, it has been used as a measure of spatial skills. Research has consistently shown a wide range of abilities on such tasks in the normal adult population; however, little is understood about why there is such variability among individuals. Functional Magnetic Resonance Imaging (fMRI) provides one method for examining differences in ability by exploring the underlying neural mechanisms. In this study, we explore brain activation during mental rotation in adults with high and low levels of spatial skills. Previous fMRI studies have found mental rotation to be associated with activation of the superior parietal lobule, middle frontal gyrus, and occipital cortex. We are interested in whether adults with varying levels of spatial skills show similar patterns of activation during mental rotation. Understanding how neural mechanisms vary with high and low spatial skills might provide insight into more general skill differences and may suggest ways to compensate for such differences in common daily tasks.

e-mail: jenburr@stanford.edu

# Paper Session B

#### CREDIBILITY AND ATTRACTIVENESS AS A FUNCTION OF PERSUASIVE INFLUENCE

D. David Barnard, Julie Pappas, Marabel Venegas, & Lynnette Zelezney, Ph.D. (California State University, Fresno)

The aim of this study was to examine the effect of attractiveness and credibility on persuasion in a naturalistic setting. Communicator attractiveness (attractive/unattractive) was manipulated. Credibility (credible/not credible) was manipulated by the communicator's attire (professional/casual). Participants (n=380) were systematically selected from retail shopping centers. Four conditions were compared. An attractive/credible, attractive/non credible, unattractive/credible, and a unattractive/non credible communicator-subject approached target-subjects, and delivered a short dialogue. Target-subjects were asked to sign a petition supporting the position of the communicator-subject. Using a Factorial ANOVA, we found attractiveness significantly effected persuasion F(3, 376)=5.894,p<.05; however, no significant effect was found for credibility F(3, 376)=.762,p>.05. Finally, no significant interaction was found for credibility and attractiveness F(3, 376)=.482,p>.05. The implications of this study may be useful to advertisers, public relations specialists, and market researchers.

e-mail: davidbarnard@mediaone.net

#### THE POWER OF RECIPROCITY INFLUENCES ANTI-SOCIAL BEHAVIOR

Christina M. Madrid (Woodbury University)

Influence can occur without formal authority through the "law of reciprocity," the belief that people should be paid back for favors they perform (Cialdini, Green,& Rusch, 1992). Previous research suggests that the act of reciprocation is often reflexive, involving little to no conscious processing, and occurs regardless of whether the favor was requested or not (Cialdini,1993). Past research has focused on reciprocity's ability to influence prosocial behavior. However, little research has examined the power of reciprocity to induce socially undesirable behavior. A convenience sample of fifty-one college students participated in a study to examine this side of reciprocity. Participants read vignettes that had them imagine taking a test in class and then being asked by one of the students to steal a pen from the teacher's desk. In one vignette this person first offers the participant the test answers before taking the pen. As predicted, when the norm of reciprocity was activated participants were more likely to steal the pen, F(1,50)=4.77, p<.05. A follow-up experimental study is currently underway.

e-mail: christinamadrid@hotmail.com

#### GENDER STEREOTYPES OF VARIOUS ETHNIC GROUPS

Megumi Hosoda, Diana R. Gallegos, & Teresa Sacks (San Jose State University)

Unfortunately, little research attention has been given to the examination of gender stereotypes associated with various ethnic groups. Therefore, using a 4 (ethnicity: Asian, African American, Hispanic, Caucasian) X 2 (gender) factorial design, the present study examined the typical

stereotypes associated with men and women of four ethnic groups on a variety of personality and behavioral dimensions (e.g., intellectual competence, social competence, self-sufficiency). Specifically, we examined (a) on what dimensions are the cultural images of men in the four ethnic groups different, (b) on what dimensions are the cultural images of women in the four ethnic groups different, and finally (c) whether or not a pattern of gender stereotypes are similar across the four ethnic groups. Results suggest that certain stereotypes associated with Asians and Caucasians are similar and certain stereotypes associated with African Americans and Hispanics are similar. Results also indicate that not all gender stereotypes are similar across the four ethnic groups. Results and implications of the present study will be discussed.

e-mail: digallegos@hotmail.com

# ATTITUDES TOWARD HOMOSEXUALITY AMONG HETEROSEXUAL ASIANS, BLACKS, LATINOS, AND WHITES

Nhan L. Truong (University of California, Davis)

The present study explores attitudes toward homosexuals among Asians, Blacks, Latinos, and Whites in the U.S. using a cumulative file (1972-1996) from the General Social Survey (GSS). Only the years that contained complete sets of variables of interest were included in the analyses. Four variables measure attitudes toward: (1) same-sex sexual relations, (2) homosexuals teaching in college, (3) removal of a homosexual author's book from the public library, and (4) homosexuals speaking in one's community. Multiple regression analyses were performed to compare Asians to other ethnic groups (Latinos, Blacks, Whites, and other ethnicities) on their opinions about same-sex sexual relations. Logistic regression analyses were employed to compare Asians to other ethnic groups on attitudes concerning homosexuals teaching in college, removal of a homosexual author's book, and homosexuals speaking in a community. Findings suggest that Asians have more negative attitudes toward homosexuals than other ethnic groups. Implications are discussed.

e-mail: nltruong@ucdavis.edu

# THE MALLEABILITY OF BIRACIAL IDENTITY: IMPLICATIONS FOR STEREOTYPE THREAT

Anthea Kelsick & Sarah Townsend (Stanford University)

Inherent in their mixed heritage is the ability of biracial individuals to identify ethnically in many different ways. Instead of being marginalized by their multiracial status, as the literature of ethnic identity once suggested (Park, 1928; Stonequist, 1937), the malleability of a biracial person's ethnic identity is now conceptualized as an asset (Poston, 1990; Kich, 1992; Jacobs, 1992; Kerwin et al., 1993; Field, 1996). The ability of a multiracial person to identify alternately with either of their ethnic heritages, and/or with a combination of the two, is a social advantage that can be used across situations. This three-part study attempts to provide a complete picture of the ethnic identity of individuals with one European-American and one ethnic-minority parent, and how the malleability of their biracial identities may guard against stereotype threat--the threat that others' judgments or an individual's own actions will threaten that person with being negatively stereotyped. Study 1 examined the content of biracial identity to first outline what a biracial identity actually entails. Study 2 then examined the malleability of biracial identity and how it is used adaptively across situations,

supporting the current literature's conceptualization of biracial identity as a social asset. Finally, Study 3 examined whether the content of some biracial identities buffer stereotype threat by allowing biracial individuals to alternately identify in a way that reduces or eliminates the negative outcomes usually reserved for minorities in such situations.

e-mail: akelsick@stanford.edu

## **Paper Session C**

#### DUAL DIAGNOSIS AND CHILDREN WITH DEVELOPMENTAL DELAYS

Stefanie T. Greenberg (University of California, Los Angeles)

Numerous studies have demonstrated that children with mental retardation are at an increased risk for psychopathology compared to non-delayed children. However, little research has focused on the specific behavior problems unique to children with a dual diagnosis of mental retardation and Down Syndrome, Autism Spectrum Disorder, or Cerebral Palsy. A sample of 12 children diagnosed with Down Syndrome, 11 children diagnosed with Autism Spectrum Disorder and 12 children diagnosed with Cerebral Palsy were drawn from a 3-year longitudinal study. Each subgroup was compared to 24 children with developmental delays not otherwise specified and 24 children without delays. All 83 children were 3-years-old. Preliminary results indicate that children with a dual diagnosis of mental retardation and Autism Spectrum Disorder or Cerebral Palsy will have more behavioral problems than children with mental retardation and Down Syndrome. Implications of this study suggest the need to focus on behavioral problems related to diagnostic category of children with a dual diagnosis. e-mail: greenbe3@aol.com

# COMPARISON IN WORD MEANING ACQUISITION WITH CHILDREN IN HONG KONG Joyce K. Kwok (University of Southern California)

Prior research in America by Gelman and Markman (1985) indicated that young children aged three to five years old were able to recognize the different grammatical forms of language and thereby figured out the meanings of new words. The purpose of this experiment was to see whether I would have the same result with another language. Twenty-two kindergarten children in Hong Kong aged from three to six years old were the participants. The hypothesis of the study was that children in Hong Kong who speak predominantly Cantonese would realize the syntactic and semantic differences between nouns and adjectives as do American children. The importance of the study was that we would able to make generalization on the recognition of different form of classes of words in young children by comparing two different cultures with two distinctive grammatical structures.

e-mail: kwokjoyce@hotmail.com

#### DO INFANTS LEARN ISOLATED WORDS MORE EASILY THAN EMBEDDED WORDS?

Alycia Cummings & Anne Fernald (Stanford University)

Adults in several languages frequently use single word utterances when addressing infants (Fernald & Morikawa, 1993). There is debate as to whether this characteristic of speech is useful to infants learning new words. We address this question experimentally, investigating whether infants are more successful in learning a new word when it is first presented in isolation then in a multi-word utterance. Subjects were 18-month-old infants tested in an auditory-visual matching procedure. In the teaching phase, subjects were alternately shown two novel objects, one of which being randomly assigned as the deebo object. Infants were either placed in the Isolated condition, in which the deebo was named

in a single-word utterance or in the Embedded condition, where deebo occurred in a multiword utterance. The testing phase consisted of both novel and familiar word trials. Preliminary analysis shows that infants with low vocabularies (< 80 on the MacArthur CDI) performed significantly better in the Isolated than the Embedded condition (p < .02), while children with larger vocabularies (> 80 on the CDI) learned the novel word equally well in either condition.

e-mail: leesha@psych.stanford.edu

# THE ROLE OF GENDER SCHEMA ON CHILDREN'S EMOTIONAL EXPERIENCES AND ATTRIBUTIONS

Rebecca Bolnick (Sonoma State University)

This pilot study identified gender differences in children's decoding and interpretation of emotional facial expressions. Twenty-eight public school children (17 females and 11 males, ages 9 and 10) responded to a questionnaire administered in a group situation. The questionnaire included a page depicting faces of both sexes expressing five basic emotions. Based on 26 questions, children labeled the emotions, shared personal experiences based on each emotion, and provided possible reasons, by sex, for emotional reactions. Our preliminary findings indicate that boys and girls were able to correctly label basic emotions. When asked about their personal experiences with each emotion, girls were two times more likely to use friendship-based examples than boys. Both groups indicated relationships as the primary possible reason for sadness in girls. This information suggests that as early as 9 years old, children have a clear understanding of social expectations regarding gender and emotions.

e-mail: rebecca@murioi.com

# UNDERSTANDING THE DEVELOPMENT OF CHILDREN'S MENTAL ROTATION ABILITY: AN FMRI STUDY

Krista B. Pelisari, Amy L. Shelton, Moriah Thomason, & John D. E. Gabrieli (Stanford University)

A child's problem solving ability improves with age, but the underlying mechanism for this change is unclear. Mental rotation, a specific type of problem solving, is a skill that develops between ages 8 and 12, and this study examines the differences in performance and in brain activation over this time span using functional magnetic resonance imaging (fMRI). Adults show particular patterns of neural activity for mental rotation, and we are asking 1) Do children show the activation patterns of adults; 2) Do children show different patterns at different ages; and 3) Is the activation correlated with other measures such as math ability or speed of processing? Using this technique to uncover the internal changes that result in external behavioral changes will help us to understand the developmental differences in mental rotation ability, and differences in neural activation over the age span may indicate changes in strategy.

e-mail: pelisari@leland.stanford.edu

# Paper Session D

# THE EFFECT OF TOKENISM ON THE POSSIBLE SELVES OF STIGMATIZED INDIVIDUALS

Adrian Aguilera (Stanford University)

Recent research on stereotype threat (Steele, 1998) has shown the negative effects of group stereotypes on individuals in relevant domains. Tokenism often results in increased salience of and attention to stereotypes (Kanter, 1977). This study attempts to determine how having token status in a small group can affect students' possible selves (i.e. perceived possibilities for one's future) by increasing the possibility for stereotype threat. Perceived possible selves (Markus & Nurius, 1986) have been shown to be important in determining motivation for variables such as school performance. In this study, participants watch a videotape of a small group at work. They are told that they will be working with that group and are asked to imagine themselves in the place of one of the group members. The ethnic composition of the group will vary so that half of the participants will be in a token situations and the other half will not. They will be compared on several measures: perceived possible selves, state self-esteem, judgments and perceptions of the group and of themselves, ethnic identification, and academic identification. Students with token status should have higher anxiety and lower state self-esteem, and minority tokens should also display limited possible selves due to stereotype threat.

e-mail: adrian22@stanford.edu

#### COMPARISON-INDUCED BODY DISTORTIONS

Gia M. Hovannisian & Jessica M. Choplin (University of California, Los Angeles)

The message is omnipresent. In order to be successful, the message says, "one must be thin and beautiful." In this weight conscious atmosphere, people are constantly comparing their bodies to others. In two experiments, we investigated the possibility that these comparisons distort people's perceptions of body size. In Experiment 1, participants compared an average-sized woman to pictures of other women, and afterwards estimated her body size. In Experiment 2, participants compared themselves to others and estimated their own body size. Estimates of body size were affected by the person to whom one was compared (i.e., under-weight vs. over-weight persons) and the word used to describe the comparison (i.e., fatter vs. thinner). These comparison-induced distortions might provide a partial account for distortions observed in anorexics (Slade & Russell,1973) and the general population (Penner, Thompson, and Coovert, 1991) and may have possible implications for eating disorder interventions.

e-mail: ghov@ucla.edu

#### **BODY IMAGE AND THE MEDIA**

Dr. Traci Mann, Kelli Garcia, & Yvette Seratto (University of California, Los Angeles)

Body dissatisfaction is a common conversational topic amongst women. More and more representations of virtually unachievable beauty ideals permeate popular television shows and are seen on the covers of numerous magazines. Reports revealing growing rates of body dissatisfaction amongst both women and men seem to parallel the media's increasing focus on physical appearance. The present study demonstrates that in both women and men, greater internalization of socio-cultural attitudes towards appearance is related to increased eating disorder symptomology and appearance related anxiety. In women body dissatisfaction is related to lower self-esteem and lower ratings of the self in relation to their peers. The present study illustrates that the type and content of the television shows watched by participants is related to the internalization of socio-cultural attitudes regarding appearance. Furthermore, a direct relationship between the type and content of watched television shows and self-esteem has been established.

e-mail: crzy4salsa@aol.com

#### THE STRESS RESPONSE IN EATING DISORDERS

Samantha P. Miller & Hans Steiner, M.D. (Stanford University)

**Objective**: There is much anecdotal evidence to suggest that anorexic patients are reluctant to relinquish their life threatening habits, often resisting treatment. The present study investigates the hypothesis that, in addition to lowering a body's autonomic stress response, a state of starvation also lowers the psychological stress response for the anorexic patient.

Methods: Affect and heart rate responses are measured during the Stress Induced Speech Task (SIST) and while watching a stressful and a neutral video. The sample consisted of 20 clinically diagnosed anorexic girls who are weight rehabilitated between the ages of 12 and 19 years. Findings are compared to 40 age appropriate, non-clinical controls to examine differences between the two groups. In addition, within-sample correlations are performed to determine whether subjects' performances on psychometric examinations (e.g., personality test) are predictive of their affective response.

**Results**: Findings indicate that anorexics show a muted physiological stress response in comparison to the non-clinical population. In addition, there are strong correlations between anorexic subjects' performances on the psychometric exams and their physiological response. For example, anorexics who have low levels of self-restraint have higher heart rates during the stressful task (r = -0. 67) than anorexics with higher levels of self-restraint. Conclusion: If findings extend outside the laboratory, anorexia may allow for stressful life events to be more easily managed, given the lowered physiological response. Thus, anorexics' may use their malnutrition as an anxiety regulator. Even when presented with a stressor, their heart rates remain well below a normal range. These findings may help explain this population's aversion for recovery.

e-mail: spm1@stanford.edu

## **Paper Session E**

#### EASE OF FALSIFICATION OF ADHD DIAGNOSIS USING DIAGNOSTIC BATTERIES

Gina Jachimowicz (University of California, Los Angeles)

The purpose of this study was to explore the ability of college students to falsify a positive Attention Deficit Hyperactivity Disorder (ADHD) diagnosis after reading the DSM-IV-TR criteria for the disorder. Students of the Psychology 10 course at the University of California, Los Angeles were given one of four commonly used diagnostic batteries and asked to answer the questionnaire as if they were afflicted with the disorder. The four batteries used were the Wender Utah Rating Scale, the Conners Adult ADHD Self-Report of Symptoms, the Brown Adult ADHD Scale, and the ADHD Rating Scale. The data from each battery will be compared relative to a positive ADHD diagnosis. It is expected that the Conners and Brown scales will be more effective in preventing a falsified diagnosis than the other two measures. The results of this study may have implications in future methods of diagnosis of ADHD for the purpose of qualification for services for students with disabilities.

e-mail: gjachimo@ucla.edu

#### THE ROLE OF TEACHERS IN PSYCHOLOGICAL REFERRALS

Christopher L. Williams (California State University, Fresno)

The objective of this study was to examine student referrals to school psychologists. Archival data (1999-2000) from a central California school district (K-8th grade) were utilized. Referrals made by teachers and student self-referrals (walk-ins) were analyzed. Specific variables of interest were 1) the demographics of students referred; 2) the nature and/or types of referrals being made; and 3) the demographics of the teachers making referrals. Hypothesis 1 predicted gender differences in student referrals made by teachers. Hypothesis 2 predicted significant differences in student referrals due to mental health issues versus behavioral/social issues. Both hypotheses were supported. There were gender differences in referrals to school psychologists among K-8th grade students in this district. Specifically, teachers referred more males (i.e., 80% of the time) than females (i.e., 20% of the time) (N=203). It was also found that students were referred to a school psychologist primarily for behavioral reasons and not for mental health problems. Male students (N=161) were referred primarily because of defiance (43% of the time), disrespect (23% of the time), and fighting (14% of the time). Likewise, females students (N=42) were referred primarily because of disrespect (48% of the time) and defiance (35% of the time). No student (N=0) was referred by teacher to a school psychologist because of suspected mental health problems (e.g., depression, anxiety, anger). Notably, all students with serious mental health problems (N=), who later required outside professional services (e.g.- California Protective Services, psychological testing, County Mental Health Services), were walk-ins or self-referrals. Implications for practice and policy will be discussed.

e-mail: clw38@csufresno.edu

# PEER VICTIMIZATION, FRIENSHIPS, AND ADJUSTMENT AMONG MIDDLE SCHOOL AFRICAN-AMERICAN AND LATINO GIRLS

Vericona Garcia (University of California, Los Angeles)

Friendships provide children with many benefits throughout their school experiences because they enhance self-esteem and confidence, and can act as a "buffer" to protect early adolescents from stressful, negative events (Parker, 1995). Girls especially, are known to rely on one another and benefit from the help of their friends. Girls with strong peer support are likely to experience better developmental outcomes in their school environment as a result. This study examines how peer victimization (a major stressor in early adolescence) among African-American and Mexican American/Latino sixth grade girls affects their psychosocial adjustment and academic achievement. We examine whether or not victimized girls who have close friends show better adjustment than victimized girls who do not have this type of friendship network. Ethnic differences and the importance of social networks in African-American and Mexican/Latino cultures will also be considered. Two schools, one predominately Latino/Mexican and other predominately African-American are included in the sample (n=200). Victimized girls are identified based on peer nominations. The psychological adjustment variables include indicators of depression, social anxiety, loneliness, and self-esteem.

e-mail: veron@ucla.edu

# PERFECTIONISM, EMOTION REGULATION, AND ADJUSTMENT TO FRESHMAN YEAR Tai M. Lockspeiser (Stanford University)

This study examined the connection between socially prescribed perfectionism and emotion regulation in the context of the adjustment to college. Unlike historical conceptions of perfectionism, socially prescribed perfectionism involves the belief that significant others expect one to be perfect. It was hypothesized that socially prescribed perfectionism would be associated with less adaptive forms of emotion regulation, and with poorer adjustment to college. To test this general hypothesis, 265 Stanford freshman filled out questionnaires at the beginning of fall quarter and then again at the end of the quarter, and fall quarter GPA was obtained. Socially prescribed perfectionism was measured using one domain of a multidimensional scale. As hypothesized, socially prescribed perfectionism was positively related to suppression (r = 0.152, p=0.013), which involves hiding the expression of emotions, and was negatively related to reappraisal (r = -0.164, p=0.007), which consists of altering the way one evaluates a situation prior to becoming emotional. Also as hypothesized, socially prescribed perfectionism was negatively correlated with adjustment to college as measured by first quarter GPA (r = -0.173, p=0.005), academic satisfaction (r = -0.195, p=0.006), psychological health (r = -0.259, p=0.000), and overall adjustment (r = -0.345, p=0.000).

e-mail: tail@stanford.edu

## **Paper Session F**

# MEMORY FOR EMOTIONAL PICTURES: A SOCIOEMOTIONAL ANALYSIS OF THE ACQUISITION OF S.C.I.

H'Sien Hayward (Stanford University), Mara Mather (University of California, Santa Cruz), Susan Turk-Charles (University of California, Irvine), & Laura L. Carstensen, Ph.D. (Stanford University)

Recent research has shown that the acquisition of spinal cord injury (SCI) may reflect emotional processes similar to those presented in socioemotional selectivity theory, which posits that the salience of emotional goals increases with shifts in the perception of time associated with aging (Carstensen & Turk-Charles, 1994; Mather & Turk-Charles, in press). The present study of forty-four subjects with paraplegia or quadriplegia between the ages of 18 and 35 was designed to test the hypothesis that individuals who have sustained a spinal cord injury will recall and recognize more emotional material than do their able-bodied peers after exposure to neutral and emotional images, thus giving indication that aging and acquisition of SCI involve similar emotional developments. Taken together, the research on aging and the research on the acquisition of disability will lead to greater understanding of human behavior in its entirety.

e-mail: hsien@stanford.edu

#### INFORMATION-PROCESSING BIASES IN OBSESSIVE-COMPULSIVE DISORDER

Jennifer Yeh, Saskia Traill, & Ian Gotlib (Stanford University)

Information-processing biases have been documented in anxiety disorders. Studies indicate that anxiety disorder sufferers have cognitive impairment in which they selectively attend to fear-related words, thus taking more time to process these words. Our study measured this attention interference in a group of adolescents with OCD who were undergoing a 10-week cognitive behavioral group intervention. The information-processing biases of these subjects were measured with the Stroop color-word test during the first and last weeks of the group sessions. During each experimental session, subjects were tested with four stroop lists: neutral, idiographic-self, general OCD-related, and idiographic-other. Data was also collected using the Y-BOCS, which indicated the OCD severity of each subject. Preliminary results (n=6) suggest that there is a significant negative correlation between pre-to-post treatment change in OCD severity and change in reading time of the idiographic-self list (r=-.9, p<.05). Neither of the correlations between change in OCD severity and change in 1) general OCD list and 2) change in idiographic-other list were significant. Possible cognitive mechanisms to account for this pattern of results are discussed.

e-mail: jjyeh@stanford.edu

#### CORTISOL, COGNITIVE BIAS, AND RUMINATION IN DEPRESSION

Sarah Mascarenas (Stanford University)

Recent research into depression reveals that about half of depressed individuals display a cognitive bias, as measured by information-processing tasks, toward negative stimuli (Gotlib 1998). Several

other studies show elevated cortisol levels and abnormal diurnal cortisol rhythms in some depressed patients (Halbreich, Asnis, Shindledecker, Zumoff, & Nathan, 1985; Souetre et al., 1989; Branchey, Weinberg, Branchey, Linkowski, Mendlewicz, 1982; Deuschle et al., 1997; Linkowski et al., 1985; Moffoot et al., 1994; Pfohl, Sherman, Schlechte, & Stone, 1985). Rumination is associated with elevated cortisol levels in normals (Roger and Najarian 1997) and may contribute to the abnormal cortisol profiles seen in depression. The present study of 40 subjects (20 depressed and 20 control) is designed to measure correlations between cortisol levels, cognitive bias toward negative stimuli, and rumination. Subjects submit six saliva samples collected at specific times over the course of one day. These samples, after being analyzed for average cortisol levels and diurnal rhythm, will aid understanding of the physiological and personality correlates of cognitive bias, how cognitive bias arises, and how it is maintained.

e-mail: sarabarb@stanford.edu

#### THE ROLE OF STRESSFUL LIFE EVENTS AND COGNITIVE BIASES IN DEPRESSION

George M. Slavich, Ian H. Gotlib (Stanford University), & Scott M. Monroe (University of Oregon)

Recent research using information-processing methodologies indicates that some depressed individuals demonstrate greater attention to, and better memory for, negative stimuli. Gotlib and Krasnoperova (1998) argued that this bias may represent a cognitive vulnerability for depression. The present study was designed to test this particular diathesis-stress model of depression by administering both a series of information-processing tasks and the Life Events and Difficulties Schedule (LEDS) to 30 individuals diagnosed with major depressive disorder. Consistent with the predictions of Gotlib and Krasnoperova, it was hypothesized that depressed individuals who exhibit a high negative cognitive bias will have experienced a fewer number of acute stressful life events in the year prior to the onset of their depression than depressed individuals who are characterized by low levels of negative cognitive bias. A 2 x 2 Pearson's chi-square test was conducted comparing stressful life events occurring one year prior to the onset of depression for the high- and low-bias depressives, and the results were significant,  $\underline{X}^2(1,N=30)=4.43$ ,  $\underline{p}<.05$ . Support was thus found for the hypothesis proposed and for the formulation that biased information processing is a risk factor for depression. e-mail: george@psych.stanford.edu

# Paper Session G

# ATTITUDES AND PERCEPTIONS TOWARD HATE CRIME PERPETRATORS AND VICTIMS

Margaret R. Mendoza, Nadine Recker, M.A., & Gerald C. Davison, Ph.D. (University of Southern California)

This study utilized the person perception vignette methodology to examine the perceptions and automatic inferences of 404 college students toward the victims and perpetrators of three different types of hate crimes and a non-hate crime. This between subjects experimental design randomly assigned the participants to read a vignette depicting a non-hate crime or a comparable hate crime that was motivated by either the perpetrator's hatred for the victim's race, sexual orientation, or the victim's religion. Participants perceptions of the targets (victim and perpetrator) in each vignette were captured via four multi-item bipolar adjective scales designed to measure responsibility, blame, harm, and violence. Results showed the victim was perceived as more violent, blameful, harmful, and more responsible in the non-hate crime scenario than in the three hate crime scenarios, and no significant difference was found in how the victim was perceived when comparing the hate crime scenarios. Participants also found the perpetrators to be more violent, blameful, responsible, and harmful in the non-hate crime scenario than in the hate crime scenarios.

e-mail: margarem@usc.edu

#### DIFFERENT ORGANIZATIONAL CULTURES

Jennifer A. Manuel (University of Southern California)

This study examined how differences in organizational culture influence the development of trust among members of virtual teams of multi-national corporations. A qualitative analysis was used to investigate three different virtual teams. The virtual teams differ in the number of organizations represented on each team. A computer-facilitated, qualitative analysis was used to examine interview data for a sample of participating members on each team. Each team's ability to build trust was compared. It was hypothesized that the number of organizational cultures represented on a virtual team is negatively associated with the establishment of trust. It was found that teams with greater differences in organizational cultures articulated less trust among team members than teams with less differences in organizational culture. This study provides applicable insight for corporations currently implementing virtual teams, as well as contributes to emerging theory on virtual teams. e-mail: jennifer a manuel@hotmail.com

# A CLINIC-BASED SURVEY OF HEALTH BELIEFS AND SEXUAL RISK BEHAVIOR IN KENYA

Jonathan E. Volk & Cheryl Koopman (Stanford University)

The prevalence of specific cultural beliefs as well as components of the Health Belief Model were examined in relation to HIV sexual risk behavior in a representative clinic based sample in Kisumu,

Kenya. During July and August of 2000, 223 subjects were interviewed at 6 governmental and private clinics. Questionnaires were administered orally in either English or Luo. Though 75% of subjects had engaged in penetrative intercourse during the preceding month, less than 20% had used a condom. Culturally specific beliefs may be partly responsible for low condom usage, with 47% endorsing the belief that HIV can pass through pores in the condoms, and 44% reporting that condom lubrication may contain HIV. The only component of the Health Belief Model that was significantly associated with sexual risk behavior was perceived barriers. Greater endorsement of perceived barriers was related to less condom usage in the past month (p<.01). Among men, an increase in HIV-related knowledge is associated with an increase in condom usage (p<.05). For women, an increase in education is associated with fewer unsafe sexual partners (p<.01). Future HIV prevention efforts should address barriers to condom usage, emphasize improving HIV-knowledge, and target people who are less educated.

e-mail: jvolk@stanford.edu

# COLLEGE STUDENTS' INTENTIONS TO USE CONDOMS: AN AUGMENTED THEORY OF PLANNED BEHAVIOR

Shannon Cernek (University of California, Davis)

The Theory of Planned Behavior is a social psychological theory that describes factors influencing an individual's behavioral intentions, and, presumably, behavior. In the present context, TPB suggests that an individual's intention to use condom during his or her next sexual encounter is influenced by three factors regarding condom use: attitudes, subjective norms, and perceived ability. Abraham et al. (1999) have suggested a fourth component, action-specific planning, which identifies specific actions taken to prepare for condom use. Using this augmented model, my research intended to determine whether students' participation in HDE 12, a lower division Human Sexuality course at the University of California, Davis, influenced components of the TPB model and intention to use condoms. A pre/post design was employed, with questionnaires distributed to students enrolled in HDE 12 at the beginning and end of fall quarter, 2000. Analysis revealed that our hypothesis was partially confirmed, with Perceived Behavioral Control and Action-Specific Planning displaying significant increases as a consequence of participation in HDE 12.

e-mail: scernek@yahoo.com

#### **Poster Sessions**

#### COURTYARD A

# WHAT DOES IT MEAN TO BECOME A PROGRAMER? A LONGITUDINAL ANALYSIS OF IDENTITY DEVELOPMENT IN YOUNG SOFTWARE DESIGNERS

Meridith G. Roberts (University of California, Los Angeles)

The development of programming knowledge has rarely been examined in a longitudinal context. Drawing on a data set collected over three years, this research proposes to assess and compare a group of fourth and fifth grade students' proficiency scores, as determined through tests, with the students' own perceptions of their programming competency. These students worked in teams on a ten-week long project in which they learned to program and implement multimedia software for use by younger children in their school. A group of 15 students was asked in interviews to reflect upon their roles as programmers in the project. Responses were analyzed along two dimensions: an individual dimension in which students discuss their own developmental trajectories, and a social dimension in which students use comparisons to other class members. These self-assessments are compared to students programming competencies, as measured by their performance on pre and post tests.

e-mail: mer@ucla.edu

#### PREDICTORS OF EARLY READING SKILLS PRIOR TO FORMAL SCHOOLING

Lisa Chon, Charryse Fouquette, Rebecca Gaffney-Brown, Wendi Jordan, Kristin Mahaney, Elva Rios, & Judith G. Foy (Loyola Marymount University)

The ability to detect and manipulate speech sounds (phonological awareness) is the best predictor of early reading skills. Little is known about the development of phonological awareness during the formative preschool and kindergarten years. The purpose of our study was to investigate factors associated with the development of early reading skills in general, and phonological awareness specifically. We examined vocabulary, letter knowledge, verbal memory, speech production, speech perception, reading, and phonological awareness in 85 four, five, and six year old children from diverse socio-economic and ethnic/backgrounds at their school sites. The home literacy environment, including bilingualism, was also assessed. Preliminary findings indicate that speech perception under noise conditions predicted early reading skills, including phonological awareness, and that vocabulary and letter knowledge play an important mediating role. Aspects of the children's home literacy environment were also associated with early reading development. These results suggest that specific factors in children's preschool and home environments may influence early reading skills. It may be possible to identify children at risk for later reading problems prior to formal reading instruction.

e-mail: jfoy@lmu.edu

# IMAGINING FACES VERSUS HOUSES IN CHILDREN: A FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDY

Jennie Park (University of Washington)

While studies concur that faces are treated specially by the mind with respect to objects, the nature of this special treatment continues to arouse debate and beg explication (Farah, Wilson, Tanaka, 1998). Functional magnetic resonance imaging studies have found activation of the fusiform gyrus in participants viewing faces to be significantly greater than activation during their viewing of houses (e.g., Kanwisher, McDermott, Chun, 1997). More recently, O'Craven & Kanwisher (2000) found that the adult fusiform gyrus responds similarly during the perception and imagination of faces, and that this response differs from that invoked during the perception and imagination of places. Our study will explore using fMRI how the fusiform gyri of children 8-10 years and 12-14 years respond to the imagination of faces versus houses. Our findings will shed light on whether the child's fusiform responds in the manner of the adult's fusiform during face imagination and in the manner of the child's own fusiform during face perception. Thusly, our findings will address how the mind develops in its treatment of faces as special.

e-mail: jenpark@u.washington.edu

#### THE DISRUPTION OF DIRECTED FORGETTING: A CASE OF REDUCED COMPETITION

Edward T. Cokely, Berta Garcia, Nicole MacDonald, & Mitchel Casados (California State University, Fresno)

The purpose of this research is to enhance our understanding of the cognitive mechanisms underlying directed forgetting when influenced by divided attention. In a series of two experiments recall and recognition were tested with between-lists instructions to remember or forget words. Presence or absence of a secondary task during second list learning was also manipulated. List length was manipulated in Experiment 1. Longer lists with varied retention intervals were used in Experiment 2. All studies used moderate to high frequency words. The findings support the reduced-competition interpretation of the effect of a secondary task on directed forgetting. The presence of a supplementary mechanism fundamental to the prevention of retrieval inhibition was indicated. This work refines the interpretation of earlier research from Conway, Harries, Noyes, Racsmaíny, and Frankish (2000).

e-mail: etc01@csufresno.edu

#### IMPLICIT LEARNING UNDER SINGLE AND DUAL TASK CONDITIONS

Markus H. Dressel, Teena Moody, & Barbara Knowlton (University of California, Los Angeles)

A forced choice task was used to measure the effects of implicit and explicit learning under single and dual task conditions. A pair of two objects (nonverbalized shapes) was presented on a computer screen for 3 seconds and subjects (UCLA undergraduate students) had to choose which of the two objects was covering a smiley face. In the dual task condition, subjects also had to generate a letter randomly every 2 seconds. Implicit learning was measured by the subjects' ability to predict the smiley face. Explicit memory was measured by a questionnaire at task end, asking which cues were associated with each other. In the single task condition I found significant implicit and explicit

learning. Under dual task conditions I expect decreased explicit memory but still existing implicit learning but at a smaller amount than under single task conditions.

e-mail: mdressel@ucla.edu

# DELAYED CONDITIONED TASTE AVERSION LEARNING IN RATS IS MEDIATED BY SEX HORMONES

Dyan Zimmerman, Deaunte Thompson, Elva Rios, Shital Pavawalla, Gianna Laiola, Jessica Hayes, Michelle Hagen, Kevin Aeling, & Michael Foy (Loyola Marymount University)

Sexual dimorphisms are found in a variety of learning paradigms, including conditioned taste aversion (CTA) learning, in which animals are poisoned with LiCl after consuming a novel substance, such as saccharin. In long-delay CTA learning, our laboratory has previously shown that adult male rats develop and maintain a significantly stronger CTA (lower saccharin preference) across a 20-day, post-extinction two-bottle (saccharin vs. water) test period when compared to female rats (Foy et al., 1996). Gonadectomy was found to eliminate long-delay CTA learning in male rats (higher saccharin preference), while enhancing CTA learning (lower saccharin preference) in female rats (Krekorian et al., 1998). Here we hypothesize that sex steroid hormone replacement in gonadectomized rats will restore CTA learning to that found in intact rats. In castrated male rats implanted with testosterone pellets, and ovariectomized female rats implanted with 17b-estradiol pellets, we found that hormone replacement in these animals completely restored CTA learning to that found in intact rats. The sexual dimorphism in long-delay CTA learning appears to be mediated by the presence of circulating sex steroid hormones

e-mail: dyan.zimmerman@verizon.net

#### THE EFFECTS OF SCOPOLAMINE ON TRACE FEAR CONDITIONING

Q.D. Ma, J.J. Quinn, & M.S. Fanselow (University of California, Los Angeles)

Scopolamine injection has been shown to cause deficits in contextual conditioning. It can be presumed that this occurs due to scopolamine's effects on the hippocampus. The hippocampus is known to be involved in non-spatial memory, and this experiment investigates the effects of scopolamine on trace conditioning. Prior to conditioning, rats were given one of the following doses of scopolamine i.p.: 0, .1, 1, 10, 100 mg/kg. They were then given 10 trials of either delay or trace conditioning. In delay conditioning, the tone conditional stimulus (CS) and footshock unconditional stimulus (US) coterminated. In trace conditioning, the CS and US were separated by 28 seconds. One week later, animals were tested for contextual fear conditioning. The next day, animals were tested for tone fear in a novel environment. Trace conditioned rats showed deficits in contextual fear only at the highest dose, while delay conditioned rats showed deficits at all doses except the lowest. In both trace and delay, only the highest dose produced a deficit in tone fear.

e-mail: qdma@ucla.edu

#### THE EFFECTS OF ANTICIPATORY ANXIETY AND SELF EFFICACY ON FEAR

Claudette Banda, Chris Andersson, & Jayson Mystkowski (University of California, Los Angeles)

Studies have found context to be a significant predictor of return of fear following exposure therapy for spider phobia (Mystkowski, Craske, and Echiverri, 2001). Since anticipatory anxiety is highly correlated with fear (Craske, 1999), and self-efficacy has been shown to influence a participant's fearful response to a phobic stimulus (Bandura, 1969), the present study sought to determine how these variables are related to a contextually driven return of fear. We hypothesized that self-efficacy would influence a participant's susceptibility to contextual manipulations with highly efficacious participants displaying smaller increases in return of fear. In addition, return of fear should vary along with anticipatory anxiety in a novel context, given the strong association between fear and anticipatory anxiety. Limitations and future directions of study will be discussed.

e-mail: cmbanda@aol.com

#### THE RELATIONSHIP OF POST-TRAUMATIC STRESS DISORDER TO SELF-MUTILATION IN BORDERLINE PERSONALITY DISORDER

Ona Anicello (University of Washington)

The relationship between post-traumatic stress disorder (PTSD) and self-mutilation was examined in the population of borderline personality disorder (BPD). Previous investigations have suggested PTSD as an intermediate between trauma history and the frequency and severity of self-mutilation in BPD, yet no studies have been carried out solely investigating this relationship. The current study hypothesized that diagnosis of PTSD would predict the frequency and severity of self-mutilation behaviors above and beyond trauma history without diagnosis of PTSD and no trauma history among people with BPD. Participants included those who met full BPD criteria from the Personality Disorders Examination (PDE) scale (N=36). Trauma history and PTSD was measured the PTSD module of the Structured Interview for the DSM-IV (SCID-I). The frequency and severity of self-mutilation was analyzed through the Parasuicide History Index (PHI). Results and Conclusions are still being determined.

e-mail: oanicell@u.washington.edu

# MEMORIES OF THE INTENSIVE CARE UNIT FOLLOWING ACUTE RESPIRATORY DISTRESS SYNDROME

Michael J. Larson, Ramona O. Hopkins (Brigham Young University) & Lindell K. Weaver (Department of Critical Care Medicine, LDS Hospital, Salt Lake City, UT)

Acute respiratory distress syndrome (ARDS) results in acute respiratory failure with severe hypoxemia and a high mortality rate. ARDS patients are treated in the intensive care unit (ICU) and are intubated, restrained, medicated with sedatives and narcotics, and experience numerous invasive procedures (Hopkins et al., 1999). Current thought is that patients have little recall of events that occur during the ICU (Jones et al., 2000) and few studies assess memories post-ICU. We interviewed 73 consecutive ARDS patients prior to hospital discharge and assessed memories of ICU events and if they were positive or negative. Interviews were tape recorded, transcribed, and rated by three raters. Fifty-two patients (71%) recalled events in the ICU. The events included mechanical

ventilation (53%), intubation (49%), restraints (56%), pain (41%) and vivid dreams and/or nightmares (73%). Most patients reported that these experiences were negative or frightening. Forty-nine percent reported memory impairments and 32% reported attention impairments. Although patients received sedatives and analgesics, most remembered their ICU experience and dreams. This information gives reason for further research on patients' memories of the ICU.

#### COURTYARD B

e-mail: mjl29@email.byu.edu

#### PERCEPTIONS OF POLITICAL LABELS

Elizabeth Stevens, Lisa Farwell, Ph.D., & Bernard Weiner, Ph.D. (University of California, Los Angeles)

Previous research documents the existence of negative stereotypes about political liberals and conservatives. Given that the terms liberal and conservative have such negative connotations, it seems reasonable that individuals would distance themselves from these terms. In the present study we explored the connotations of the new, friendlier terms "compassionate conservative" and "rational liberal." Two hundred fifty-six undergraduates read one of three scenarios in which two hypothetical individuals had either HIV, obesity or unemployment-related needs. Using 11-point scales, participants indicated how much money, from least \$ amount to greatest \$ amount, they would allocate to the hypothetical individuals. They also predicted how much a "compassionate conservative," "typical conservative," "rational liberal," and "typical liberal" would allocate. Participants also rated their own ideology and indicated which ideological label they most identified with. Results showed that the new terms were effective in presenting a positive image of labeled individuals and that participants readily identified with these new labels.

e-mail: estevens@ucla.edu

# HETEROCENTRISM AND HETEROSEXISM IN HETEROSEXUAL COLLEGES' PERCEPTION OF BISEXUALITY AND HETEROSEXUALITY

Shaghayegh Habibi (Woodbury University)

How people define sexual orientation may have important implications for understanding hostility toward sexual outgroups. This study used an ethnocentrism framework to predict how college students would define heterosexuality and bisexuality. One hundred and eighty-nine participants (125 female, 64 male) responded to a list of behaviors or emotions a woman had performed with or felt toward either a same sex or cross sex individual. Participants decided if each of the items would indicate that the woman was bisexual or heterosexual, respectively. As predicted, bisexuality was defined more by sexual behavior than by emotions, whereas, both emotions and sexual behavior defined heterosexuality. This same pattern was also found when students were asked to openendedly define heterosexuality or bisexuality. We also confirmed that it took more extreme sexual behavior to label someone bisexual than it did to label someone heterosexual. This finding is explained by the availability heuristic as applied to heterosexual students' own behavior.

e-mail: Regent33@aol.com

# ETHNIC IDENTITY BIFURCATION INDUCED BY STEREOTYPE THREAT IN HIGH ACHIEVING PERSONS OF MEXICAN DESCENT

Yenda Prado, Valerie J. Purdie, & Claude M. Steele (Stanford University)

Pronin, Steele, & Ross (2001) have extended Steele's (1997) stereotype threat theory to include the concept of identity bifurcation: the tendency to respond to negative stereotypes by disidentifying with characteristics seen as problematic with respect to success in the relevant domain but continuing to identify with non-problematic characteristics. They found that math identified women under threat were likely to distance themselves from problematic features associated with the group while maintaining other features of identity that were non problematic to their math identities. This study extends the bifurcation theory to include minorities. It was found that when faced with stereotype threat, persons of Mexican descent may engage in identity bifurcation in which they reject aspects of their culture deemed threatening to personal/social success within the dominant culture while retaining the non-threatening parts of their culture. The study found that subjects of Mexican descent tended to bifurcate more if they had a lower sense of ethnic identity, weaker Spanish language skills and usage, disagreed with an article presented, and were 3rd and 4th generation subjects.

e-mail: yprado@stanford.edu

# BEING "CHINESE" AND BEING "AMERICAN": A STUDY ON CHINESE AMERICANS' ETHNIC IDENTITY, ACCULTURATION, ATTITUDES, AND CULTURAL ORIENTATION.

Albert Tsz Hung Yu & Faye J. Crosby (University of California, Santa Cruz)

Focusing on one of the most important but overlooked ethnic groups in the United States, this study investigates the psychological and behavioral differences between American Born Chinese (ABC) and foreign born Chinese American (FBC) college students. We expect that there will be significant differences between both groups in terms of their centrality of ethnic identity, feelings of acculturation and racial discrimination, attitudes toward affirmative action and bilingual education, and their cultural orientation. We also expect to see some correlations among the attitudes, feelings, and feelings of acculturation to ethnic identity. One hundred randomly chosen Chinese American students from three University of California campuses (UC Santa Cruz, UCLA, and UC Berkeley) completed a comprehensive questionnaire and ten of them volunteered to be in a part of a 30 minutes interview. Preliminary data analysis found no significance difference between ABC and FBC in terms of their attitudes toward bilingual education and affirmative action. It shows that both groups have a neutral view on social issues that are relevant to the future of their ethnic group.

e-mail: uytrebla@hotmail.com

# INDIVIDUAL AND COLLECTIVE SELF-ESTEEM AS PREDICTORS OF LATINO ACCULTURATION AND ACADEMIC SUCCESS

Zoe Gillispie (Scripps College)

Self-esteem is a significant factor in the acculturation and academic success of Latinos, yet few studies directly examine this relationship, and existing research has revealed contradictory results. Some studies report a positive correlation between self-esteem, acculturation, and academic success, whereas others describe a negative, or a curvilinear relationship (Gandara, 1995). Research has neglected to investigate the contribution of individual and collective self-esteem to the prediction of

acculturation and academic resilience. Moreover, investigators have questioned the linear and orthogonal measures of acculturation without exploring the relative contribution of each approach simultaneously (Negy & Woods, 1992). This study developed and tested a questionnaire on 101 Latino college students (70 females and 31 males) to investigate the relative contribution of both individual and collective self-esteem towards the prediction of acculturation, measured linearly and orthogonally, and GPA. Multiple regression analyses indicated that only the collective self-esteem variable was a significant predictor of acculturation, accounting for 22% of the variance, and that neither self-esteem subtype differed in their prediction of linear vs. orthogonal acculturation. Implications for future studies are discussed.

e-mail: zgillisp@scrippscol.edu

#### PREDICTORS OF MARITAL SATISFACTION AMONG INTERRACIAL COUPLES

Carolyn Marquez & Dr. Jean Peacock (California State University, San Bernardino)

Although much research has focused on the formation of interracial marriages and relationships, few researchers have given much attention to how interracial couples maintain stability in their relationships. The current study surveyed 47 partners of an interracial dyad attending a Southern California University. Participants completed a demographic questionnaire, as well as scales that measured: familial acceptance of the interracial relationship, perceptions of oneis ethnic identity, personality characteristics, race-related stress, and marital satisfaction. General results suggested that stress related to perceptions of collective racism and familial acceptance of the relationship predict marital satisfaction. More specifically, female Hispanic participants with an African American partner reported stress related to institutional racism as a predictor of marital satisfaction, familial acceptance was not a factor. However, female Hispanic participants with a Caucasian partner reported that their partner's family's acceptance was the single most important predictor of marital satisfaction. Implications of the data to traditional marital therapy will be discussed.

e-mail: caroo18@hotmail.com

# THE BIRTH-ORDER EFFECTS CONTROVERSY: WITHIN-FAMILY EFFECTS AND THEIR GENERALIZABILITY

Manchi Chao (University of California, Berkeley)

The replicability and generalizability of birth-order effects have long been controversial. This study was conducted (1) to test the replicability of Sulloway's (1999) findings of within-family birth-order effects, and (2) to examine the generalizability of such effects outside the family of origin by using open-ended questions in the form of the "Who am I" test. Birth-order effects found within the family were replicated. The pattern of birth-order effects on the "Who am I" test closely resembled those found within family, although the effects were less salient. The overall findings in this study suggest that birth-order effects are not restricted to family settings, but that birth order exerts more influences on personality within the family than outside the family. Suggestions for future research are also discussed.

e-mail: manchi@uclink.berkeley.edu

# RELATIONSHIPS BETWEEN AGE AT IMMIGRATION AND BODY IMAGE AMONG ASIAN AMERICAN ADOLESCENTS

Shirley Baek (University of California, Davis)

One of the major social challenges during adolescence is heightened body image concerns. Through this social challenge, Asian American adolescents have particularly unique issues as they face the acculturative processes within the receiving culture. This study is based on data collected from the National Longitudinal Study of Adolescent Health conducted in 1994. Asian American male and female adolescents (N=1,007) in grades seventh through eleventh were selected. The relationship between Body Mass Index (X=21.5), an objective measure of weight, and subjective weight perceptions were compared to create a body image distortion variable. Body image distortion was then compared to age at immigration. It was found that adolescents who immigrated at an older age were more likely to have relatively accurate body perceptions than those who immigrated at a younger age. Those who immigrated at a younger age tend to distort their body perceptions upwardly. This overall finding suggests that the longer an Asian American adolescent is exposed to U.S. culture, the more likely the adolescent will perceive himself or herself being overweight e-mail: sbaek@ucdavis.edu

# A CROSS-CULTURAL INVESTIGATION OF THE IDEAL FEMALE BODY PORTRAYED BY THE MEDIA

Jessie McKelvey (Arizona State University West)

American women currently face an ever-thinning image for gender identification. Over the last century, there has been a dangerous change of the ideal body size represented by the media (Garner, Garfinkel, Schwartz, & Thompson, 1980; Silverstein, Perdue, Peterson, & Kelly, 1986). Attempts have been made to investigate this phenomenon, including current trends and possible social implications. However, women have been generalized into a single, gender-based category without consideration for the great diversity of the population. This research incorporates the variable of ethnicity in order to determine if there are differences in the thinness ideal between African American and European American women. Using an analysis of variance it was determined that there is a significant difference (p=. 001) in the Body Mass Index between the two samples. This suggests that the thinness ideal is not a single ideal and differences have profound implications for understanding the prevalence of eating disorders and self-esteem issues for individuals of the population.

e-mail: R8McKelvey@aol.com

# COGNITIVE CONSEQUENCES OF BODY IMAGE AND ADOLESCENT DEPRESSION Greta Klevgard (Stanford University)

During childhood, the prevalence of Major Depressive Disorder is relatively equal among both boys and girls, but at the onset of adolescence, a developmental period characterized by physical, emotional, and social change, girls become much more prone to experience a depressive episode (Allgood-Merten et al., 1990; Nolen-Hoeksema, 1994). This sex difference continues throughout the life span, where women are twice as likely to suffer from Major Depressive Disorder than men (Kessler et al, 1994). The literature suggests that negative body image is often a strong correlate of

depressive symptoms in adolescence (Rierdan and Koff, 1997). The current study is designed to look at attentional biases as a possible cognitive link between body image, self-esteem, and depression in the adolescent population. Such a cognitive bias for negative body image and/or self-esteem stimuli, is likely to be found with higher incidence among clinically depressed adolescents than non-depressed adolescents, even when controlling for actual body image.

e-mail: klevgard@stanford.edu

# DEPRESSION AND DIVORCE: A FEMINIST SOCIAL CONSTRUCTIONIST APPROACH TO WOMEN'S ADULT DEVELOPMENT

Jessica T. Barnes (University of California, Berkeley)

In nearly every country studied, women are twice as likely as men to suffer from unipolar depression (Culbertson, 1997). While it has been demonstrated that stressful life events such as divorce make significant contributions to the onset and course of depression (Brown & Harris, 1978; Sclater, 1990), little attention has been paid to the tremendous influence of the construal of and sense of control over these events (Stoppard, 2000). Using data from the Mills Longitudinal Study, an ongoing study of women begun in 1958, this research attempts to take a closer look at the intricate relationship between divorce and depression in women across adulthood. Beckis theory linking autonomy and depression (Beck, 1996) is adopted and applied in order to take a feminist, social constructionist perspective on the development of depression in women. Initial analyses address whether depressive symptoms predict divorce or whether divorce predicts depressive symptoms in women in both early and later adulthood. To address Beckis hypothesis, additional analyses examine whether sense of control over the divorce predicts depressive symptoms in women.

e-mail: jrockadelic@yahoo.com

#### PSYCHOLOGICAL ABUSE IN YOUNG ADULT ROMANTIC RELATIONSHIPS

Veronica Padilla, Heidi Sivers, & Albert Bandura (Stanford University)

The present study investigates the relationship between young women's views on psychological abuse and their experience with psychological abuse in romantic relationships. The following 4 questions are examined: (a) What is the prevalence of psychological abuse in early relationships? (b) To what extent do young women fail to classify psychological abuse as negative? (c) Does failing to view psychological abuse as negative increase the likelihood of experiencing psychological abuse in romantic relationships? and (d) How does this change from high school to early college years? One hundred and forty high school-aged girls and 79 college-aged women completed self-report questionnaires concerning their experience with and opinions of psychologically abusive behaviors. I hypothesize that high school-aged girls will be more likely than college-aged women to consider psychologically abusive behaviors to be positive and that this will increase their likelihood of being in relationship where psychological abuse occurs.

e-mail: vpadilla@stanford.edu

#### PARENTAL REARING BEHAVIOR AND CHILDREN'S ANXIETY

Linda Tseng, Jeff Wood, & Marian Sigman (University of California, Los Angeles)

Previous research has linked parental rearing behavior to childís anxiety and worries. This study investigated the relationship between parental reports of warmth and control, their childís anxiety, childís report of parental styles and self-perceived anxiety levels using a battery of questionnaires. Children and their families were randomly selected from a sample seeking help at the Neuropsychiatric Institute for outpatient services at UCLA. Preliminary results indicate that children and parents who report higher levels of warmth also report lower levels of anxiety whereas those who report higher levels of control will also report higher levels of anxiety. These findings provide further evidence of the role of parental rearing behavior in children's behavior.

e-mail: tseng@ucla.edu

#### AFFECTIVE FORECASTING AND ANXIETY

Daisy Grewal (University of California, Los Angeles)

Previous research has indicated that people, in general, are highly inaccurate in predicting the duration and intensity of their emotions in response to both good and bad events. For example, we often predict that we will feel much worse after a negative event than we actually do. Anxiety research has shown that people who suffer from anxiety highly exaggerate the impact of future events on their emotional lives. The purpose of the present study is to assess the relationship between the ability to predict one's own moods with the presence of anxiety symptoms. If anxiety-sufferers are even worse than non-anxiety sufferers in predicting their emotions, it may be concluded that people with anxiety are experiencing severe neglect of their psychological immune systems. This would support the popular notion that anxiety can be explained as the exaggeration of normal human reactions to life events, and might inform the treatment of anxiety.

e-mail: dgrewal@ucla.edu

#### EARLY DEVELOPMENTAL PATTERNS OF AGGRESSION

Jessica Brauner (Yale University)

The great amount of research that has been performed on childhood aggression demonstrates the importance of understanding it and attempting to prevent it in children. The purpose of this study is to examine the relationship between different types of aggressive behaviors, and the relationships to these behaviors of gender, sex, and teacher responses. An observational study was carried out in a day care center. Subjects consisted of one classroom of 16 toddlers (8 boys and 8 girls, mean age = 2 years, 5 months) and two classrooms with a combined total of 36 preschoolers (17 boys and 19 girls, mean age = 3 years, 11 months). Significant differences were found between the behaviors of toddlers and preschoolers. Additionally, significant correlations were found among the different types of aggression. Finally, teachers' responses were significantly correlated with certain aggressive behaviors. These results illustrate the importance of future studies that differentiate between different types of aggression and the significance of teachers to respond appropriately depending on which aggressive behavior is present.

e-mail: jessica.brauner@yale.edu

# THE EFFECTS OF TIME DELAY AND REMINDER ON THE DOOR-IN-THE-FACE TECHNIQUE

Janna Fong, Wakiza Gamez, Diana Marchetti, & Peggy Shen (Santa Clara University)

The effect of a time delay on the door-in-the-face technique was investigated. All participants were assigned to four conditions. The control condition was asked a small request (volunteering for several hours at an Alzheimer's center), while the DITF condition was asked a large request (volunteering once every week for the remainder of the school year) prior to the small request. A delay condition was asked the larger request and was subsequently contacted approximately one week later and asked the small request. The fourth condition included a preceding verbal reminder of the previous contact before the small request was asked (also, approximately one week later). The DITF condition resulted in the most compliance and the two time delay conditions had lower compliance rates than the control condition (however, not significantly). Possible explanations for the findings include the nature and wording of the requests as well as time of the school year.

e-mail: wgamez@juno.com

# EFFECTS OF GENDER AND AUTHORITY TYPE IN THE ORGANIZATION ON COMPLIANCE

Cynthia L. Owens (Arizona State University West)

The purpose of the present study was to examine the effects of authority's gender and type of the authority (seniority-based, moral-relational and competent) on employees' readiness to comply with a supervisor's request in the organization. One hundred forty-nine participants were selected for this study (84 females, 65 males). The sample included employees representing various organizations such as medical personnel and retail employees. This was a convenience sample and the respondents were quasi randomly assigned to two group (male authority or female authority). As predicted, regardless of employees' gender, the highest compliance was demonstrated to competent authorities, followed by moral-relational, with least compliance to seniority-based authorities. However, other results contradicted consistent prior research findings by illustrating higher compliance to female, not male competent authority. Interestingly, both male and female participants responded more favorably to a female authority and this effect was significantly stronger in male respondents. It was also discovered that female respondents were more likely than male respondents to comply with a male authority due to the supervisor's seniority. Likewise, female authority when compared with male authorities did elicit more compliance if they were managers with moral-relational qualities.

e-mail: ccofsuns@aol.com

# P N

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Java City

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Corner Pocket

Friday: 11:00 am to 7:00 pm

Saturday/Sunday: 11:00 am to 5:00 pm

Coffee House

Friday: 9:00 am to 12:00 am Saturday: 11:00 am to 4:00 pm Sunday: 11:00 am to 5:00 pm

Jamba Juice

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Sonoma State University

South San Francisco High School

SouthWestern

Stanford University

University of California, Berkeley

University of California, Davis

University of California, Irvine

University of California, Los Angeles

University of California, Santa Barbara

University of California, Santa Cruz

University of Southern California

University of Washington

Washington High School

West Valley College

Willamette University

Woodbury University

Yale University

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