Undergraduate Honors Projects – 2001-2002

Christine Adams

The Influence of Attachment and Gender Traditionality on the Vocational Aspirations of Adolescents

Advisors: Leslie Leve and Dr. Kirby Deater-Deckard

The relationship between adolescent vocational aspirations, attachment to parent, and gender role traditionality was examined using a longitudinal sample of 351 children (approximately 50% female). Data was collected at age 14/15 and age 17/18. Two hypotheses were examined: (1) attachment security was expected to correlate positively with higher vocational aspirations, (2) higher gender role traditionality was expected to relate to lower vocational aspirations for girls and higher vocational aspirations for boys. In a simple correlation analysis, boys' attachment at age 14/15 showed a significant positive relationship to higher vocational aspirations at age 17/18. No significant relationship between attachment and vocational aspirations was found for girls. A hierarchical regression analysis on the gender role traditionality hypothesis showed trends toward significance for both females and males, suggesting that further research is needed in this area.

Michelle M. Ayres

Gender Differences in Reported and Displayed Psychological Aggression

Advisor: Deborah Capaldi

There has been a significant amount of research on communication between men and women in intimate relationships. Evidence suggests that both men and women use psychological aggression within relationships at approximately equal rates. The current study examines gender comparisons of the severity of psychological aggression employed by young adult partners in heterosexual relationships. Additional analysis involved examination of gender differences in the rate of positive affect used during interactions. Study questions were examined for 158 young adult men and their partners involved in a study of couple's relationships. Psychological aggression and positive affect were assessed through questionnaires and observational coder ratings. Findings indicated little or no gender difference in the prevalence and/or severity of psychological aggression used in intimate relationships. Results suggest couples counseling should address the aggression of both partners in order to improve communication and reduce the escalation of negative affect into psychological and physical abuse.

Charmaine Chan

Does similarity breed contempt? Revisiting the role of similarity And intentionality in blaming responses

Advisor: Gale Pearce

Festinger's social comparison theory suggests that people pay closer attention to the actions of similar others than dissimilar
others. Taylor and Mettee (1971) suggested that, this attentional salience translates into stronger negative emotions and more negative personality appraisals for the interpersonal transgressions of a similar other than a dissimilar other. However, their previous work lacked a direct measure of attentional salience so the exact hypothesis could not

be tested. In the present study, participants read about either an intentional or unintentional transgression committed by a peer, who they expected to meet. Half of the participants were told that they were similar to their peer while the other half was told that they were dissimilar. In contrast to Taylor and Mettee's hypothesis (1971), participants' emotional responses to the transgression and personality assessments of their peer were not influenced by the similarity manipulation. However, participants expressed greater liking and desire for friendship with a similar peer. The intentionality manipulation did result in significant differences such that participants had more positive emotional responses and thought that their peer was more responsible and conscientious when the peer committed an unintentional act.

Cory Coleman

Neural Network Models of Thermotaxis in the Nematode Caenorhabditis elegans

C. elegans is a 1mm long soil nematode which is capable of remaining at a preferred temperature by navigating a thermal gradient through a behavior known as thermotaxis. In order to investigate the neural mechanisms underlying thermotaxis, both feedforward and recurrent neural networks are successfully trained to control thermotaxis in a computer model of the nematode. Additionally, existing robotics algorithms for thermotaxis-like tasks are used as the inspiration for a neural-hybrid control system which not only mimics the thermotaxis behavior but also replicates the effects of laser-killing individual neurons in C. elegans.

Kristin Flegal

Putting It In Words: Does Verbal Overshadowing Affect Motor Memory?

Advisor: Dr. Michael Anderson

Describing memories for difficult-to-verbalize perceptual experiences has been shown to impair later recognition memory for those experiences, a phenomenon termed "verbal overshadowing." Previous investigations have demonstrated the detrimental effect of verbalization in a number of perceptual modalities. The present study examines whether the verbal overshadowing effect applies to motor memory. Specifically, does verbally describing a recently practiced motor skill (golf putting) impair one's ability to perform that skill?

Bradley Kauwe

An attentional Background: The Role of Attention in an Apparent Motion Visual Illusion

Advisor: Dr. Paul Dassonville

The Roelofs effect is a visual illusion that produces apparent motion of a stationary object in the opposite direction of a moving background, similar to the apparent motion of stars in a moving field of clouds. Given the overt imposition of a moving background, the question is what role does attention play in this illusion of mislocalization? A minimal visual cue was used to draw attention to one side of the visual field during the presentation of a target. Targets were significantly mislocalized in the opposite direction of the cue, apparently drawing the perceptual center towards the cued direction along with the remembered location of the target positions. However, auditory cues had little effect on target localization. Ultimately, very little visual stimulus was required to elicit an induced motion effect, suggesting the role of attention in perceiving visual space, but somewhat divorced from general or cross-

modal attention. Visual attention may consolidate space around an attended location, thus expanded the apparent distance between perceived objects and loci of attention.

Alice M. King

Always Look on the Bright Side of Life: Suppression using Words with Negative Valence

Advisor: Dr. Michael Anderson

The notion of repression has been controversial throughout its history. Recent work using the think/no-think (TNT) paradigm suggests, however, that people can actively inhibit memories for emotionally neutral experiences. The current study uses the TNT paradigm to ask whether emotionally negative words can also be suppressed as effectively as neutral words. Twenty-four introductory psychology students were instructed to recall, or to try to avoid recalling, previously studied negative and neutral word pairs during a series of trials, either 0, 1 or 16 times. The Dissociative Experiences Scale and the Freyd/Goldberg Trauma Survey were also administered to participants. Participants' ability to suppress negative words, as well as the relation of this ability to trauma history is discussed.

Bridget Klest

Trauma, Dissociation, and Attention: Memory for Neutral and Traumatic Stories

Advisor: Dr. Jennifer J. Freyd

Previous research has consistently found a positive correlation between history of trauma and dissociation, and recent research (DePrince and Freyd, 1999) suggests that people who score high on a measure of dissociation may have enhanced abilities at dividing attention and suppressing traumatic information from consciousness. The current study set out to replicate these findings using more complex stimuli than have been used previously. Fifty-two subjects, half scoring high and half low on the Dissociative Experiences Scalewatched neutral videos while listening to neutral and trauma related stories. High dissociators remembered significantly more than low dissociators when listening to neutral stories, and performed no differently than low dissociators when listening to trauma related stories. This interaction was significant, t (50) = 1.72, p < .05 (one-tailed), and this finding is consistent with previous research.

Karman Leung

Acculturative Influences on Body Dissatisfaction, Fear of Fat and Self-Esteem: A Comparison between European American and Asian American College Women

Advisor: Dr. Gordon Hall

This study compared body dissatisfaction, fear of fat, body image and self-esteem between 134 European American and 27 Asian American college women. It also investigated the effect of acculturation on these aspects within the Asian American group. Racial differences were not found. There were no significant differences in the degree of body dissatisfaction, fear of fat and self-esteem between the two groups. Acculturation did not have a significant effect on body dissatisfaction, fear of fat, body image or self-esteem among Asian American college women. However, intercorrelations were found among the measures used in this study. These findings suggest that Asian

American women have similar beliefs on body image and self-esteem as their European American counterparts. Factors other than acculturation may have influenced the level of body dissatisfaction and self-esteem in Asian American women.

Brad Lytle

How Feelings of Guilt Affect Empathy

Advisor: Dr. Bertram Malle

The present study examines the differences in the effect guilt will have on empathy when guilt is caused by breaking a moral rule (moral guilt) or a social standard (social guilt). Participants wrote about a past event in which they felt social guilt, rule guilt, or no guilt. Each group had 20 participants with ages ranging from 17 to 22. The present study examines empathy in two ways, by measuring fantasy, and empathetic accuracy. A fantasy score was obtained by counting the number of times thoughts and feeling were added to a fictional story. An empathetic accuracy score was obtained by rating the accuracy of inferred the thoughts and feelings of a target person. No effect of guilt was found on either empathy task.

Sarah Murrell-Kindle

To Laugh, Or Not to Laugh?: Individual Differences in the Enjoyability of Aggressive Humor

Advisor: Dr. Ellen Peters

Gray's Behavioral Inhibition and Activation Systems theory was used to examine the impact of individual differences on the degree to which participants found aggressive humor enjoyable or upsetting. Ninety-one female undergraduates watched and evaluated 18 one-minute cartoon films clips (nine aggressive and nine non-aggressive) in small groups. Participants also periodically rated their mood, and evaluated such cartoon nostalgia as like or dislike for the main cartoon characters. In contrast to the hypotheses, few significant correlations were found with the Behavioral Inhibition and Activation Systems scales. However, significant correlations were found between rankings of violence and upset feelings, and both positive and negative mood decreased over the course of the study. Implications of social influence variables, such as participant laughter, are discussed.

Emily Neuhaus

Forest for the Trees: The Weak Central Coherence Theory of Autism

Advisor: Dr. Dare Baldwin

Central coherence is defined as the ability to integrate otherwise isolated information to arrive at a coherent and useable whole. The current paper explores the theory put forth by Frith (1989) that weak central coherence is the fundamental cognitive feature underlying autism. The diagnostic criteria for autism are reviewed, and Frith's theory is subsequently explored in depth. Empirical evidence from the domains of visuo-spatial, linguistic, and social processing is presented, as are challenges to the theory. It is concluded that Frith's theory parsimoniously accounts for the assets and deficits of autism, including tentative support for the hypothesis that weak central coherence underlies autism's theory of mind impairments. The discussion is followed by a research proposal intended to

examine the links between theory of mind and central coherence, which employs established research methods as well as one new measure. Potential areas of future research into central coherence are speculated upon, and include schizophrenia and dissociative disorders.

Rachel M. Nichols

The Role of Mother-Infant Interactions in Language Acquisition: A Fresh Look at the Fine-Tuning Hypothesis

Advisors: Dr. Dare Baldwin & Rebecca Brand, M.S.,

The current study considered the fine-tuning hypothesis from the point of view of semantic development. Mothers and their infants aged 16-20 months were observed in a natural play setting using toy sets that were assembled based on reported vocabulary of the infants. A three-part prediction was made; first, that mothers would utilize more supportive kinds of speech when speaking of objects for which infants had no label, second that the use of supportive speech would decrease as infants aged and vocabulary increased, and third, that mothers would speak more about objects for which infants had no label as infants aged. None of the predictions were borne out; however, an interesting trend of speaking more often about typical than atypical objects was observed. Significance of the findings is discussed and ideas for future research are proposed.

Veronica Stotts

Deconstructing Barbie: The Pressure Women Feel to Obtain an Ideal Body: An Evolutionary vs. Social Identity Perspective

Advisor: Dr. Gordon Hall

From an evolutionary perspective, men and women should have the same vision of the ideal female body because women would strive for the body. However, previous evidence suggests that women actually strive for a body that is thinner than the male ideal, suggesting thinness may be a social construct. This would indicate that women strive to be thin because they are striving to attain a standard set by other women, not in order to attract a mate. In the current study, men and women did not differ on the waist-to-hip ratio or level of thinness they thought to be ideal for women. thinness is a social construct, based on the Social Identity Theory. The Social Identity Theory proposes that all knowledge is socially derived through social comparisons , which indicates that women attain knowledge of the ideal female body by comparing themselves to other women. The theory also proposes that social competition is one of several strategies group members use to achieve positive distinction. Results in the current study support these components of the theory, supporting the hypothesis that thinness is not a result of evolution, but rather is socially derived.