Undergraduate Honors Projects – 2005-2006

Michelle Baldwin

Positive Bias in Perception of Physical Discipline

Advisors: Dr. Jennifer Freyd and Lisa Cromer

Recent research show that the general population tends to be very accepting of physical discipline by parents; survey results range from 70-88% approval of spanking or slapping (Bower-Russa, 2005). Endorsement of violent methods of discipline is significantly correlated with both the practice and severity of physical discipline (Scholar & Stein, 1995) and the abuse rate among parents endorsing physical discipline is four times higher than among those who do not (Straus, 1992). Attitudes towards discipline are significantly influenced by personal experience (Bower-Russa, 2005); people tend to endorse and view more positively forms of discipline that they have experienced. This can be partly explained by the Pollyanna Principle (Matlin & Stang, 1978) which predicts that people are more likely to interpret and remember experiences as more positive than they actually are. The current study examines positive bias specifically in memory for physical discipline situations. Participants were shown sets of images depicting scenarios in which parent figures disciplined child figures using either physical or verbal methods. Participants' memory for the images was tested by showing participants a video comprised of the previously viewed (target) images and of altered versions of those images that were either more positive or negative than the target images. Participants were asked to indicate if each image in the video was the same or different from those in the set they had viewed earlier. For each participant, a valence score was calculated indicating whether they reported having seen more positive or negative images, ranging from -18 (most negative) to 18 (most positive). For the verbal discipline scenario, the mean score was .91, indicating a slight significant positive bias, $t(76)=.036$, $p<.05$. For the physical discipline scenario, the mean score was 6.67, indicating a strong significant positive bias, $t(76)=14.618$, $p<.01$. Comparison of the two mean scores showed that the positive bias was significantly stronger in the physical discipline scenario, $t(152)=-9.322$, $p<.01$. This study also examined participants' attitudes towards and experiences with various forms of parental discipline.

Tabitha Bolton

Taxonomy of Imaginary Companions

Advisor: Dr. Marjorie Taylor

Imaginary companions come in all shapes and sizes. In order to provide information about the diversity of imaginary companions, we have created a database of imaginary companions descriptions collected from various studies in the past decade. This study examines the influence of data source in relation to the types of imaginary companions that are created by children and adults alike by looking at descriptions of such friends provided by parents, children, and adults who recall their own companions from childhood. In addition to examining the diversity in types of imaginary companions, this study sought to establish a method of systematic record keeping for the collection of imaginary companion descriptions compiled in the Imagination Lab at the University Of Oregon.

Michelle Harrison

The Mediation of Executive Functioning Between Parenting Styles and ToM

Advisor: Dr. Lou Moses

This research investigated the individual differences in theory of mind (ToM) and executive functioning (EF) in preschool-age children. The relationship between parenting styles and ToM was also investigated, and specifically examined EF as a possible mediator between parenting styles and ToM. A sample of 3.5- to 5.5-year-old children (N = 23) were run through a series of EF and ToM tasks while parents filled out a Parenting Style Questionnaire. It was hypothesized that a positive relationship would be found between Authoritative parenting and EF, as well as between parenting styles and ToM. After running a correlational analysis, a significant relationship was found between ToM and Authoritative parenting styles, r=.484, p<.05. Future studies should use broader, more diverse populations to capture a more representative sample, as well as include supplementary tasks to further investigate EF skills. Limitations are also discussed.

Laura Johnson

Temperament and Strategies for Activational and Inhibitory Control

Advisors: Dr. Mary Rothbart and Jessica Kieras

Inhibitory control (the capacity to suppress inappropriate approach behavior) and Activational control (the capacity to perform an action when there is a strong tendency to avoid it) are of particular importance to the study of self regulation and temperamental differences in attention. These types of control are two areas used to measure temperamental Effortful Control. The researchers combined a measure of strategies used to engage in behaviors that require Inhibitory control or Activational control with Evans and Rothbart's Adult Temperament Questionnaire (short form). Strategies were categorized as Effortful, Mental, or Task management. The researchers also assessed participant focus on the potential punishments or rewards associated with activating or inhibiting a behavior. Through statistical analysis, the researchers found that people high in Negative Affect reported using more strategies which focused on the potential detriments of failing to control their behavior. Persons high in Extraversion/Surgency reported more strategies focusing on the potential benefits of regulating their behavior. Temperamental Effortful Control correlated with the use of Effortful type strategies and the use of strategies in general. This study adds to the body of research aimed at helping individuals more effectively regulate their behavior.

John Knorek

Narcissism and Self-Perception Biases

Advisor: Dr. Sanjay Srivastava

This study examined narcissists' self-perception biases in 117 same-sex dyads. We analyzed correlations between narcissism and self-enhancement of personality traits associated with either egoistic or moralistic biases. The egoistic bias is a tendency to overestimate one's own power, status, and agency, whereas the moralistic bias a tendency to overestimate one's own likeability and agreeableness. Narcissism was measured with the Narcissistic Personality Inventory (NPI); self-enhancement bias was operationalized as the difference between self-ratings and partner ratings on a variety of trait measures. NPI scores were significantly correlated with the egoistic self-enhancement bias (power and extraversion) but not with the moralistic self-enhancement bias (agreeableness and conscientiousness). Ways to better measure certain self-enhancement biases and the usefulness they will have in understanding narcissism are discussed.

Kelsey McAlpine

The Original and Induced Roelofs Effects: Can the Same Shift in the Apparent Midline Explain both Illusions?

Advisor: Dr. Paul Dassonville

Roelofs (1935) demonstrated that when shown a rectangular frame offset left or right from straight-ahead, observers would consistently underestimate the eccentricity of that frame. This phenomenon became known as the (original) Roelofs effect. Later work by Bridgeman, Peery, and Anand (1997) showed that observers would misperceive the location of a target dot when it was presented within an offset frame, with the target seen to be shifted in the opposite direction of the frame (the induced Roelofs effect). Various studies have demonstrated that both the original and induced Roelofs effects can be explained by a shift in the observer's apparent midline towards the center of the offset frame (Werner, Wapner, and Bruell, 1953; Dassonville, Bridgeman, Bala, Thiem, & Sampanes, (2004); Dassonville & Bala, 2004). However, a study by de Grave, Brenner, and Smeets (2002) suggests that the same shift in the apparent midline cannot explain both illusions. In light of possible confounds found in the de Grave study, an experiment was designed to retest the hypothesis that both the original and induced Roelofs effects could be explained by the same shift in the apparent midline. Results from this initial experiment replicated the finding of an original Roelofs effect, but failed to find a significant induced effect. A second experiment, designed to be more similar to previous ones demonstrating an induced Roelofs effect, replicated the finding of an induced effect, but now failed to find the original Roelofs effect. Although it is unclear why we are unable to find both an induced and original Roelofs effect in the same paradigm, this inability does seem to indicate that both effects cannot be explained by the same shift in the apparent midline.

Jayne Mercer

Cross Cultural Differences in Attitudes and Beliefs about Intimate Partner Violence

Advisor: Jeff Todahl

The current study seeks to better understand the cross cultural differences in the attitudes and beliefs about intimate partner violence or interpersonal violence (IPV) based on ethnic identity. Research has shown that IPV does not discriminate between culture, age, socioeconomic status, gender, etc., but very little is understood about how specific ethnicities differ in their attitudes and beliefs about IPV. This study proposes to assess the attitudes and beliefs of a diverse population of students at the University of Oregon by means of an online survey consisting of three questionnaires. The first questionnaire assessed a subject's cultural identification, the second assessed the subject's attitude and beliefs about wife beating, and the third assessed a subject's attitudes and beliefs about IPV. The goal of this study is to better understand the way in which culture influences attitudes and beliefs about IPV and possibly be able to better serve its victims and perpetrators with this more in depth understanding. Data is currently being analyzed.

Kristina Mullins

When Students Discuss Diversity, What Do They Talk About?

Advisors: Dr. Holly Arrow and Jasmine Lam

Thirty groups of five students who shared the same ethnic/racial identity (15 groups) or had diverse identities (15 groups) discussed the climate for diversity at the University of Oregon (UO). Computerized text analysis of transcripts was used to examine the frequency with which twenty-eight topics related to diversity were discussed.

The relative frequency of associated terms differed in common and diverse identity group conversations for 13 topics. Topics that came up more often in common than in diverse identity groups were definitions of diversity, the University's commitment to diversity, whether or not the campus is diverse, quantity of diversity, comparisons, settings on campus, regions of the United States, social categories, religion, ideologies, and identities (all p<.05). Diverse identity groups discussed language and nationality more often than common identity groups (p<.001). A post hoc division of groups into those composed mostly or entirely of students belonging to the ethnic/racial minority (Anglo/European-American/Caucasian, 15 groups) and those composed mostly or entirely of students with an ethnic/racial minority identity (15 groups) was used to check whether the common/diverse differences might be equally well explained by majority/minority status. Majority groups matched the common identity groups on all topics except for the University's commitment to diversity. These groups also used significantly more affirmative-toned terms than minority-dominated groups. Minority groups matched the diverse group pattern except that they solely discussed ability, a topic that included terms related to disabilities. Results suggest that common identity and majority groups focused more on differing categorizations of people, beliefs, and lifestyles and allocated more of the discussion to quantifying and comparing diversity levels at UO. Diverse identity and minority groups tended to discuss a broader range of topics, including issues related to adjustment, as indicated by the focus on nationality, languages, and abilities.

Keely Muscatell

Stressful Life Events, Chronic Difficulties, and Symptoms of Clinical Depression

Advisor: Dr. Scott Monroe

Acute, major life events have found to be associated with depression onset and symptom specificity, but little is known about the relationship between chronic stress and these characteristics of depression. Employing an investigator-based measure of life stress with 100 individuals diagnosed with major depressive disorder (MDD) we assessed acute and chronic stress and determined whether or not each participant had experienced a major difficulty or a severe stressful life event prior to depression onset. Severe stressful life events were found to be associated with heightened depression severity levels, lower levels of global functioning, and increased presentation of sad mood, hopelessness, and crying. Major difficulties occurring prior to depression onset were found to be unrelated to differences in depression severity, symptom patterns, and global functioning. These findings are discussed in terms of the differential roles that acute and chronic stressors play in the presentation of MDD.

David Osborn

Individuals' Willingness to Risk Death for Their Country

Advisors: Dr. Holly Arrow and Dr. John Orbell

This paper presents a review and analysis of the relevant literature. A variety of disciplines were reviewed, including sociology, anthropology, political science, military history, and psychology. The theories are organized into those that have a cultural or biological (evolutionary) emphasis. This willingness is also explored in its pre-modern manifestations in order to better understand its development from earlier forms of social organization to that of the nation. The analysis suggests that this willingness utilizes evolved mental mechanisms that served group identification and between-group conflict in small kin based groups. Such a willingness requires a strong affective component that is provided for by kin-like identifications with the nation. A case study of the breakup of Yugoslavia highlights the application of this type of analysis.

Emily Peterson

Suppressing Visual Memories Through Executive Control

Advisor: Dr. Michael Anderson

Forgetting is often perceived as the challenge one must overcome to have a good memory, when in fact, forgetting is actually an important component in maintaining a good memory. If people remembered everything from their daily lives, they would be overloaded with unimportant thoughts, making it hard to recognize relevant information. For example, if one remembered every parking place one's car had ever occupied, it would become difficult to bring to mind only the current parking place. Irrelevant or intrusive thoughts can also be distracting and unpleasant. For these reasons the ability to push information out of mind can be a useful skill. For instance, if one's favorite restaurant changed location, one would benefit from pushing the memory of the old location from mind, so that one can now remember the new location. Being able to forget is a useful component of memory that allows people to focus on, and therefore, remember only relevant information from their surroundings. This study, using the Think/No-Think paradigm, attempted to determine how actively avoiding thought for a visual image would affect a person's ability to later recognize that item. The stimuli used were neutral words paired with complex visual-spatial pictures of neutral faces or natural places. The results indicate that relative to a perceptual baseline, there is an overall inhibition for items that were actively not thought about when collapsed across the faces and places stimuli. These findings validate the hypothesis that actively avoiding thought of a picture leads to impaired recognition of that picture at a later time. The final recognition test showed that when subjects were later presented with the word-picture pair that they had actively avoided thinking about, they were less confident that they had even ever seen that word-picture pair before. Further support for this paradigm showed that actively thinking of a picture in some cases facilitated memory of that word-picture pair, but this was not consistent across all stimuli. These findings support the everyday use of memory inhibition by indicating that humans have executive control over what they think or don't think about, which later influences what they remember. If people choose to avoid thinking about a picture, even when presented with its cue, they can actually inhibit that memory, making it harder to recognize at a later time.

Emery Pinkert

The Geometry of Perception: Distortions of the Apparent Midline in the Induced Roelofs Effect

Advisor: Dr. Paul Dassonville

Previous research by Mergner, Nasios, Maurer & Becker (2001) has provided evidence that the apparent midline (or an observer's perception of straight ahead) plays a fundamental role in our ability to locate objects in space. Despite the apparent midline's potential fundamental importance in our ability to locate objects, our perception of straight ahead is vulnerable to errors (Dassonville & Bala 2004a, 2004b; Dassonville, Bridgeman, Bala, Thiem, & Sampanes, 2004; Werner, Wapner, & Bruell, 1953). In the present experiment, we examined the distortion of the apparent midline caused by the induced Roelofs effect (Dassonville & Bala 2004a, 2004b; Dassonville et al., 2004) using stimuli presented in three-dimensional space to determine the geometry in which the apparent midline is distorted. Previous research has suggested that the distortion may be a rotation, translation, or warping (Vallar, Guariglia, Nico, & Bisiach, 1995; Ferber and Karnath, 1999; Gogel and MacCracken, 1979). The perceptual errors for targets located at different depths from observers were compared to the errors predicted by the three potential types of distortion. Two experiments were run, the second to address potential confounds in the initial design. The data from both experiments suggests that the geometry of the midline distortion is predominately a rotation. However, the axis of rotation indicated by the data is significantly behind the eyes (and head) suggesting that the distortion could include an additional translation component. The potential for a translational component may be supported by previous work indicating eye dominance switching based on stimulus characteristics and eye position in azimuth (Khan and Crawford, 2003; Banks, Ghose & Hillis, 2004).

Leslie Sanchez

Reacting to Potential Prejudice: Implications for Interactions with Stigmatized Others

Advisor: Jonathan Cook

Because social stigmas are devalued, individuals with stigmatized identities may be more likely than others to be cautious in social interactions with new acquaintances. Such a strategy might be useful, for example, in evaluating the safety or prejudice level of a new acquaintance in order to avoid psychological or even physical danger. To test this hypothesis, we studied dyadic interactions between stigmatized and non-stigmatized participants. Participants with either a visible or concealable stigma were paired off with participants with no identifiable stigma and left alone to interact with each other for five minutes. These interactions were videotaped and coded for subjects' comfort level, depth of personal disclosures, number of questions asked, and number of encouraging comments. We hypothesized that relative to non-stigmatized participants, stigmatized individuals would be less comfortable during the interaction, disclose less personal information, ask more questions, and encourage interaction partners to reveal more about themselves. Contrary to predictions, stigmatized participants were no less comfortable than non-stigmatized participants and did not disclose less. In fact, there was a general trend toward greater comfort and depth of disclosures among stigmatized participants. There were no significant differences between the groups with respect to questions and encouraging behavior. Results suggest that the way stigmatized individuals may be cautious in social interactions with new acquaintances may be profiled differently than hypothesized above.

Carissa Sharp

Self/Other Overlap with God: Gender and Denominational Effects

Advisor: Dr. Sara Hodges

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

Andrew Shipley

The Development of Altruistic Preference: A Cross-cultural Study

Advisor: Dr. William Harbaugh

A cross-cultural developmental study is being conducted to measure youth preference for altruistic versus selfish behavior in Eugene, Oregon and the Pastaza province of the Ecuadorian Amazon. Rational choice models of human motivation and behavior predict individual maximization in social dilemma situations. This prediction has failed, however, to receive empirical support. Instead, significant variation both within and between cultures has been demonstrated in individuals' preference for altruistic and selfish behavior. No cross-cultural developmental research exists to explain this variation in adult behavior or to map its developmental trajectory. In the current study, a mixture of decision and game theoretic tasks were used to assess the altruistic preference of children ages 6 to 15. Seeking to isolate degree of capitalist market integration, a predictor variable often implicated in between cultures variance, the study included participants in Oregon public schools and participants in remote Shuar villages of the

Ecuadorian Amazon. Pending the completion of data analysis, this study seeks to map the development of altruistic preference across an important maturational period. The question of starting-state universality in human altruistic preference will be explored and key periods of socialization and cultural divergence will be identified.

Lily Shipsey

Stressful Impairment of PPI and Asymmetry Effects in Schizotypy

Advisor: Dr. Patricia M. White

Attenuated pre-pulse inhibition of the startle blink reflex has been found in schizophrenia (Braff et al., 1978) and schizotypy (Cadenhead, Geyer and Braff, 1993) and is thought to reflect impaired sensorimotor gating. Although atypical laterality has been found in dichotic listening tasks for paranoid schizophrenics (for a review, see Romney, Mosely & Addington, 2000) differences in response laterality have not been examined for PPI in schizotypy and schizophrenia. This research examines atypical response laterality in schizotypal subjects by measuring PPI independently from both eyes during a dichotic listening task during both baseline and stressor conditions in 9 controls and 9 psychometric schizotypals. In a repeated-measures ANOVA with IV of eye, ear, condition and group, a main effect of condition showed impaired PPI during stress for each of the four lead intervals measured. Across conditions, PPI at each eye was diminished for probes administered through concordant ears at all lead intervals. For 120 ms probes administered binaurally, the groups showed similar PPI response in right and left eyes during baseline, but the groups showed opposite patterns of laterality impairment in right and left eyes during stress. In a pre-planned comparison of baseline PPI, schizotypals tended to have impaired PPI at 60ms but not at other intervals relative to controls. Correlational analyses reveal relationships between symptoms of schizotypy and laterality differences in both conditions, with higher symptom scores related to decreased PPI in the left eye and when sounds are delivered through the left ear. In summary, this research suggests that stress impairs short lead PPI across groups, that some symptoms of schizotypy are related to decreased PPI, and that laterality differences between groups arise during stress at 120ms lead intervals.

Allison Sinclair

Interacting with Depressed Adolescents: Is it Aversive to Parents?

Advisor: Lisa Sheeber

The purpose of this study was to examine whether interacting with depressed adolescents has an adverse effect on parents' emotional states (examining the potential adverse effects depressed adolescents have on their parents). Methods employed during data collection involved a two gate recruitment procedure consisting of a school assessment and an in-home diagnostic interview. The CES-D and the KSAD-S questionnaire scores from the two interviews were used to place participants into one of three groups; depressed, healthy, or subclinical. Certain selected families then participated in a family interaction assessment. Pre and post interactions scores evaluating levels of hostility, depression, and positive affect in each family member was determined by a self administered questionnaire. Pre scores evaluated participants' emotions before the interaction, post scores measured participants' levels of emotions during the interaction. Participants were 246 adolescents and their parents. We hypothesized that there would be a group by time interaction, indicating that parents of depressed adolescents were more depressed, more hostile, and had less positive affect than parents of adolescents in the other two groups, post problem solving interaction. Analyses were run separately for mothers and fathers, as well as for each emotion. The results of the repeated measures analyses did not support our hypothesis or past research in this area. This indicates that more research in the field of adolescent depression must be done in order to isolate more accurately some of the main contributors in terms of family functioning in an effort to develop more effective treatments and preventions.

Andrea Stull

Observer Explanations for Stereotypic and Counterstereotypic Behaviors & the Role of Explanations in Stereotype Change

Advisor: Jonathan Cook

One theory of stereotype change suggests that thinking about convincing explanations for counterstereotypic behavior may prompt people to re-think and modify a group stereotype. Past research has had mixed success in determining the validity of this theory, perhaps in part because experimenter-derived explanations have not been particularly convincing to participants. We were interested in exploring the role of participant-generated explanations in stereotype change and the possibility of systematic differences between explanations for stereotypic versus counterstereotypic behavior. Participants were presented with identical images of either an elderly man (study 1) or an Asian woman (study 2) and asked to provide explanations for the person's behavior. Explanations were coded using an adaptation of Malle's (2001) F.Ex coding scheme. Repeated measures ANOVA revealed that participants presented with a counterstereotypic target provided more intentional (reason and causal history) explanations and fewer unintentional (cause) explanations than participants presented with a stereotypic target. Contrary to expectations, there was no effect of generating explanations on stereotypic belief measures. Results are consistent with theories of subtyping, which suggest that counterstereotypic behavior is often seen as unrepresentative of a group, allowing perceivers to maintain stereotypic beliefs in the face of disconfirmation (Rothbart, 1981; Weber & Crocker, 1983). Thus one of the cognitive mechanisms underlying subtyping may be the generation of intentional attributions for counterstereotypic behavior.

Shawn Vallereux

Are Extraverts Happier? Situation Matters: A Day Reconstruction Method

Advisor: Dr. Sanjay Srivastava

In a recent study, R.E. Lucas and E. Diener (2001) argued that reward sensitivity comprises the core feature of Extraversion. We accept their argument, though believe that a daily-diary type method is a necessary next step in testing this theory. In the present study, a Day Reconstruction Method (Kahneman, 2003) is utilized to test the reward-sensitivity hypothesis against a potentially competing hypothesis that extraverts select more enjoyable social situations than introverts. Data from a sample of 109 respondents were used to test the 2 hypotheses with a repeated measure of happiness on multiple reconstructed episodes. The results clearly show support for the situation-selection hypothesis with no support being found for reward-sensitivity.

Kristin Williamson

The Influence of Language on Visual Selective Attention

Advisor: Dr. Edward Awh

Previous studies have indicated that sensory experience can modify attentional processing. Here we present evidence that language experience may modify target discrimination ability in the four quadrants of the visual field. Observers reported the identity of a single target digit that was presented either within a dense array of letter distractors (noise trials) or alone in the visual field (clean trials). Virtually all monolingual English speakers showed a significant deficit in discrimination ability in the upper-left quadrant, as demonstrated by low response accuracy, compared to performance in the other three quadrants. This asymmetry was found only with the noise trials, suggesting that it relates specifically to the resolution of visual interference rather than target signal enhancement. In contrast, subjects whose native language was Korean, Chinese, or Japanese showed either significantly lower discrimination ability in

the bottom two quadrants of the visual field, or an overall null result, raising the hypothesis that long-term experience with English characters influenced the efficiency of interference resolution with these stimuli. In support of this claim, similar patterns were observed across both language groups when non-alphabetic distractors were presented, indicating that experience with written language modified the efficiency of interference resolution across quadrants.