Yukon Dr., Fairbanks, AK 99775, [4]USGS, Patuxent Wildlife Research Center, National Museum of Nat. Hist., Smithsonian Institution, Washington, DC 20013. We surveyed the remnant mixed hardwood/coniferous cloud forest at elevations ranging from 2950m to 3160m at El Retiro, in the isolated Montañas de Cuilco, Huehuetenango, western Guatemala. Removal trapping for 4 days each in July 2008 (wet season) and January 2009 (dry season) resulted in 106 captures representing 6 species of shrews and rodents. This diversity of small mammals is the lowest that we have recorded from a Guatemalan cloud forest, compared to 10-15species at other localities. Based on capture rates, the species in order of relative abundance in the small mammal community are *Peromyscus beatae sacarensis* (n=45), *P. guatemalensis* (n=34), *Reithrodontomys microdon* (n=9), *R. sumichrasti* (n=7), *Sorex saussurei* (n=6) and *R. mexicanus* (n=5). The low species diversity may result from habitat destruction by recent large-scale fires and by logging for firewood and lumber. Habitat loss may have direct effects, but also leads to fragmentation that may restrict reinvasion after fire. This represents the first collection of small mammals from this mountain range.

Psychology

GENDER, ETHNICITY, & ORGAN DONATION. Daniel Baughn[1], Stephen M. Auerbach[1], & Laura A. Siminoff[2]. [1]Department of Psychology, Virginia Commonwealth University, Richmond, VA 23284 and [2]Department of Social & Behavioral Health, Virginia Commonwealth University, Richmond, VA 23298. Understanding the factors that influence the procurement coordinator (PC) and the family at the time of organ donation may be one way to increase the rate of donation. Using an analogue format, this study examined the interpersonal behavior of PCs and simulated families during the donation request process. Interpersonal processes were assessed using behavioral ratings by independent observers using the Impact Message Inventory (IMI), the Participatory Style of Physician Scale (PSPS), and the Siminoff Communication Content and Affect Program (SCCAP). Three-way ANOVAs were conducted to evaluate the effects of gender of PC, ethnicity of PC, and ethnicity of family on the interactional variables. There was a significant PC gender × scenario (scn) interaction effect on IMI Affiliation, $F(1,25)= 6.65$, $p<.02$. There was a significant PC gender × ethnicity interaction effect on IMI Control, $F(1, 25)=4.68$, $p<.04$. There was also a significant PC gender × ethnicity interaction effect on the Shared Decision Making subscale of the PSPS, $F(1,25)=5.83$, $p<.02$. There was a significant PC ethnicity × scn interaction effect on the Positive Affect scale of the SCCAP, $F(1, 25)=5.52$, $p<.03$. Implications for the field of organ donation and the training of procurement coordinators are discussed.

IMPACT OF EMOTIONAL AROUSAL AND SECONDARY TASK MODALITY ON PERFORMANCE. Rachel R. Phillips & Poornima Madhavan, Dept. of Psych, Old Dominion University, Norfolk VA 23529. In order to examine the effect of different modality distractors (visual or auditory) of differing affect (positive or neutral) on performance participants completed a luggage screening task with and without a secondary task in one of four conditions (positive-visual, positive-auditory, neutral-

visual, neutral-auditory). In the auditory condition, positive affect was induced with Irish drinking songs and neutral was attained using Native American Drum music; for the positive-visual condition the lyrics were transcribed and in the neutral-visual condition symbols were substituted. 2 (distraction: present vs. absent) x 2 (affect: positive vs. neutral) mixed ANOVAs for hit rate (H), false alarm rate (FA), and confidence (C) in the auditory and visual conditions revealed that participants in the auditory condition had fewer false alarms when distracted versus undistracted. This indicated that participant performance improved as participants were less likely to incorrectly identify a target. In contrast, participants in the visual condition demonstrated a decrease in hits indicating that they were less likely to correctly detect a target. Between-subjects ANOVAs for H, FA, and C when distracted in the auditory condition revealed no significant differences between the positive and neutral conditions. Similarly, 2 (modality: visual vs. auditory) x 2 (affect: positive vs. neutral) between-subjects ANOVAs for H, FA, and C indicated no significant differences between any of the conditions. Results suggest that music is beneficial to visual search performance when compared to no stimulation. However, performance while distracted did not vary as a result of affect or modality.

INTENTIONAL FORGETTING OF AUTOBIOGRAPHICAL MEMORIES IN UNIVERSITY STUDENTS: THE IMPACT OF PERSONAL RELEVANCE ON THE DIRECTED FORGETTING EFFECT. Tiffany M. Steinhagen & Elaine M. Justice, Dept. of Psychology, Old Dominion University. This study examined the effect of personally relevant information on the directed forgetting of autobiographical memories. College and neutral-themed words were presented to an undergraduate population in conjunction with the Motivation Scale Learning Questionnaire. The degree to which a student's internal motivation for academic success influenced the directed forgetting effect was examined. Participants showed greater recall of college-themed words than neutral-themed words. Results indicated that individuals with high motivation were less likely to forget college-themed words under the forget instruction.

EXAMINING DISCREPANCIES BETWEEN STATED AND REVEALED PREFERENCES DURING INTERNET SEARCH. Molly M. Liechty & Poornima Madhavan, Old Dominion University, Norfolk VA 23529. Using an eye tracker we examined decision-making processes during an internet search task. Specifically, we studied the intrinsic factor of gender and extrinsic aspects of a website (or, negative externalities). Twenty-five undergraduate students browsed a simulated real estate website where they viewed photographs of ten houses, each with six rooms. We manually altered four homes to reveal Level 1 externalities (or, properties that can easily be changed) such as pink paint on the wall, and Level 2 externalities (or properties that cannot easily be changed) such as power lines in front of the house. The relationship between "stated preferences", or preferences that are verbalized, and "revealed preferences," or preferences that are revealed from an actual decision was analyzed as a function of negative externalities and participants' gender. Average dwell times, fixation durations/counts, and saccade counts/amplitudes were compared to participants' stated preferences on general and home specific surveys. Results revealed

that men demonstrated a more aggressive search pattern than women, with a greater number of saccades with shorter saccade amplitudes for the former. Data also suggested that a discrepancy exists between stated and revealed preferences. Although participants initially stated that they disliked a room, their eye movement indices did not reflect this trend indicating that subjective verbalizations were discrepant from actual internet search patterns.

FOR WHOM THE BELL TOLLS: ACADEMIC BEHAVIORS, SELF-REGULATION, AND PACED DRINKING IN ACOA AND NON-ACOAS. Gabrielle M. D'Lima & Michelle L. Kelley, Department of Psychology, Old Dominion University, Norfolk, VA 23529. The present study examined whether meeting criteria for being the adult child of an alcoholic (ACOA) explained differences in alcohol consumption and consequences experienced by college students (N = 127) during their first semester. Further, this research sought to identify possible mediators (i.e., past-hedonistic time orientation, future time orientation, self-pacing, alcohol interference with academic behaviors and general self-regulation) that weaken the direct relationship between ACOA status and alcohol consumption and alcohol consequences. Multiple hierarchical regressions were conducted to determine if ACOA status would explain additional unique variance in alcohol consumption and consequences beyond the mediating factors. ACOA status remained a significant predictor of alcohol consumption and consequences even after accounting for variance explained by the pertinent mediators. These results extend previous research by indicating the importance of variables that may mediate the relationship between ACOA status and alcohol use and alcohol-related consequences. Additionally, these results suggest that rather than simply comparing drinking outcomes in ACOAs as compared to non-ACOAs, it may be necessary to identify specific behaviors that may result in increased drinking behavior.

HERPES STIGMA ATTITUDES IN COLLEGE UNDERGRADUATE STUDENTS. Anna K. Harrington & Valerian J. Derlega, Dept. of Psychology, Old Dominion University, Norfolk, VA. Approximately one in five people in the United States has genital herpes. Previous research conducted with college student participants showed that those with more general knowledge concerning the disease were less likely to hold negative attitudes toward persons infected with genital herpes. Using the 10 item Rosenberg Self-Esteem scale ($r = .85$), the author found no interaction between self-esteem and negative attitudes concerning herpes. While the correlation between knowledge of genital herpes and more accepting attitudes towards persons with genital herpes was supported ($p = .037$), there was no correlation between negative attitudes and self esteem (p = ns).

THE INFLUENCE OF HIGHLY EMOTIONAL FACES ON THE ATTENTIONAL BLINK. Brittany N. Pizzano & Hilary E. Stebbins, Dept. of Psych., Virginia Wesleyan College, Norfolk VA 23502. The anger superiority effect demonstrates that angry faces capture attention and are identified more quickly relative to happy and neutral faces. Little is known, however, regarding the extent and duration of the attentional capture

of angry faces. The present study utilized an attentional blink paradigm in which participants were asked to identify two emotional target stimuli (e.g. female faces) out of a series of neutral distracter stimuli (e.g. male faces). The emotional expression of the first target was manipulated (happy, angry, or neutral) and it was predicted that greater attentional capture by the angry face would result in lower ability to process and identify the second target, resulting in an attentional blink. A total of 36 undergraduate students (28 female, 8 male) participated in this study. Analyses revealed an effect of both gender and emotion of the target stimuli. Happy faces produced the largest attentional blink for both male and female target trials. Angry faces were also found to produce an attentional blink for male but not female targets. These results suggest that greater attentional capture may result from general emotional arousal rather than a threat or negativity bias and that target gender is an important factor in processing facial expressions of emotion. This study was funded by the Virginia Academy of Science.

PSYCHOLOGY FOR NATIONAL SECURITY: IMPLEMENTING PSYCHOLOGICAL PRINCIPLES TO IMPROVE TRAINING OF AIRPORT SECURITY SCREENERS. Poornima Madhavan, Department of Psychology, Old Dominion University, Norfolk, VA 23529. This research examined the hypothesis that stimulus diversity during training can positively influence transfer of learning in complex tasks such a luggage-screening. Participants (n = 48) detected the presence of threat objects in x-ray images of airline passenger luggage. Training stimuli varied as a function of (1) categorical diversity (few vs. several categories of threat objects), and, (2) exemplar diversity (few vs. several exemplars within each category). Participants transferred this learning to a scenario where they encountered novel targets. High categorical diversity led to highest hit rates, fewest false alarms and fastest detection during transfer, which was not significantly influenced by exemplar diversity. However, high exemplar diversity negatively impacted transfer when categorical diversity was low, leading to the fewest hits and slowest response times. The results have implications for designing training modules for luggage-screening personnel in a manner that capitalizes on natural human cognition.

EXPLORING THE ASCH PARADIGM: POPULATION VALIDITY, THE SEX DIFFERENCE, STIMULUS CLARITY, AND CONTEXTUAL INFORMALITY. James P. O'Brien, Tidewater Community College, Virginia Beach VA 23453. This pilot study replicates Asch's (1951, 1956) independence-conformity paradigm with modifications to identify topics favorable for fuller empirical exploration. Initial analyses (i.e., stimulus clarity/ambiguity) were reported at the Academy's annual meeting by Schwabenbauer, Schwabenbauer, Larkin & O'Brien in 1999. Further analyses indicate a number of unresolved issues: (1) With samples more representative of the adult Americans, evidence for population validity is weak; (2) Contrary to the literature, there is scant evidence for a significant sex difference in independence-conformity; (3) Contextual informality (i.e., peer experimenters) merits further study; (4) Since the "Asch dilemma" is predicated on stimulus clarity, the finding of stimulus ambiguity in control treatments for both men and women supersedes all other factors

in importance. Since independent control replications are infrequent in the literature, especially for female baselines, systematic investigation of stimulus clarity in Asch-type paradigms is urgently needed before other issues can be adequately tested and resolved.

SPATIAL NAVIGATION AND LATENT LEARNING IN FEMALE *BETTA SPLENDENS* USING FOOD REINFORCEMENT. Casey Beatley, Raluca Brand & Andrew Velkey, Department of Psychology, Christopher Newport University, Newport News VA 23606. *Betta splendens* are exploratory predators within their native habitat. However, male *Betta* are residential and search for prey within a territory, whereas female *Betta* are non-residential and explore larger areas in search of potential mates and prey. In order to locate and identify a suitable mate, female *Betta* must navigate male territories while also foraging for prey. Latent learning occurs when changes in performance are not immediately observable after experience. Are *Betta* capable of latent learning, and do females learn their explored environments even when prey or mates are not encountered? In the present study, a single subject design with multiple replicates, 6 female *Betta* were placed in a complex maze containing two choice points and multiple alleys. Three of the subjects received food reinforcement for maze completion on every trial. The other 3 fish explored the maze freely for a period of 8' during each of the first 17 trials. The free-roaming fish later received reinforcement on trial 18. Results showed that the roaming fish demonstrated stability in maze completion more quickly than always-rewarded fish. While the present study revealed evidence of latent learning, excessive variability masked the effect. Future research should utilize a simpler maze to better demonstrate this effect.

DEVELOPMENT OF A COMPUTERIZED IMAGE ACQUISITION SYSTEM FOR ANALYSIS OF *BETTA SPLENDENS* BUBBLE-NESTING BEHAVIOR. Raluca Brand[1], Casey Beatley[1], Christine Searles[1], Brian Roller[2], & Andrew Velkey[1], [1]Dept. of Psych., Christopher Newport University, Newport News VA 23606 and [2]Dept. of Psych., The University of Arizona, Tucson AZ 85721. The present study demonstrates a computerized method for quantifying bubble nest size in male *Betta splendens*. Bubble nesting is a reproductively relevant behavior in *Betta splendens*. Certain environmental variables may influence bubble-nesting behavior, and investigators may wish to examine more closely the factors related to the presence and quality of bubble nests. In order to further study factors associated with bubble nesting, the development of a reliable methodology to measure various parameters of bubble nests is necessary. Several improvements to the procedure and apparatus were implemented in the current methodology in order to further increase the accuracy of image analysis. One major improvement in image acquisition results from using new equipment such as a Canon EOS 50D SLR Digital Camera. Images are captured using a RAW lossless format at 15.1 megapixels resolution. Higher resolution image acquisition results in better image analysis. Furthermore, a polarized filter was used in order to reduce glare. The current experiment aims to reduce measurement error that previously resulted from similarities in color intensity between bubbles and objects reflected due to glare. Results are discussed in regards to opportunities for refinement of measurement technique and application of the newly improved methodology.

THE RELATIONSHIP BETWEEN BIRTH ORDER AND IPIP BIG-FIVE FACTOR MARKERS. Laura A. Boettcher & Gayle T. Dow, Ph.D. Dept. of Psychology, Christopher Newport University, Newport News, VA, 23606. The purpose of this project is to investigate how one's birth order (only, youngest, middle, and oldest) potentially impacts scores of the IPIP Big-Five Factor Markers. Traits such as extraversion, agreeableness and neuroticism can be swayed by birth order. Birth order researchers have found that common traits exist within only, oldest, middle, & youngest born individuals, specifically first-borns tend to be more conscientious, whereas later-borns tend to be more agreeable. An online survey was completed by 192 participants with questions regarding participants' birth order and 50 questions from the IPIP. The IPIP Personality measure considers questions using the Big 5 personality model-extraversion, agreeableness, neuroticism, openness & conscientiousness. It was hypothesized that the youngest-borns would score higher on the agreeableness and openness. Trends emerged for extraversion and neuroticism.

STIMULUS DISCRIMINATION DURING AN INSTRUMENTAL LEARNING TASK IN *DANIO RERIO*. *Morgan A. Cote-Coble* & Christina Philyaw, Dept. of Psychology, Christopher Newport University, Newport News VA 23606. Using an instrumental choice procedure, 12 zebrafish (*Danio rerio*) were tested for their ability to discriminate between a stimulus associated with food reward (S+) and a stimulus associated with no food reward (S-). The subjects swam to the end of a T-maze and made a choice between two distinctly colored arms. Two squads of 6 fish were tested. For 6 of the subjects, the blue arm served as the S+ and was followed by a single bloodworm, while the green arm served as the S-. For the other 6 fish, the blue stimulus served as the S- and the green stimulus served as the S+. The right or left position of each S+ was randomly determined at the beginning of each trial. Subjects completed 3 trials per day until choice stabilization was evident, in which the same stimulus (S+ or S-) was selected in 8 out of 10 trials. Overall, 6 of the 12 subjects preferred the S+ over the S- while 2 fish failed to stabilize on a single reward; trials with the other four fish are nearing completion with most of them trending towards preference for the S+. Replicate trials are currently being conducted using another squad of naive subjects. The preference for signaled reward indicates that *Danio rerio* can be used for instrumental choice research, and future studies should use an inbred strain of *Danio rerio* to reduce genetic variability that may contribute to individual differences in the acquisition of instrumental responding.

Statistics

SUPPORT VECTOR MACHINES WITH THE RAMP LOSS AND THE HARD MARGIN LOSS. J.P. Brooks, Dept. of Stat. Sci. and O.R., Virginia Commonwealth University, Richmond, VA 23284. The support vector machine (SVM) is a well-established method for classification based on an approach that emphasizes minimizing misclassification error while maximizing the distance between sets of correctly