Fredericksburg canal in the spring of 2011. The objectives for summer 2012 was to determine if this species has established a population, and in addition which species of turtles live in the canal and obtain life history information on these species, including estimates of population size. Hoop nets were placed along a 150 m stretch of the canal in the general area of where the single specimen of the yellow-bellied slider was found. Length and weight were taken for each individual and we attempted to determine age by counting the ridges on the plastron. Population size was determined using open population mark-recapture models. Turtles captured in the canal were red-bellied cooters (*Pseudemys rubriventris*), painted turtles (*Chrysemys picta)*, eastern snapping turtles (*Chelydra serpentina serpentina*), stinkpots (*Sternotherus odoratus*), and the red-eared slider (*Trachemys scripta elegans*). The yellow-bellied slider was not found. The single specimen found in 2011 was likely introduced as these are common in the pet trade. However, the red-eared slider is also a non-native. The population size estimates of species for which we had a sufficient sample size are given by the Jolly-Seber model (open population) for the area of focus (roughly 150m). Estimates include population size and 95% confidence interval: red-bellied cooters, 35 (24-74); painted turtles, 9 (9-12); red-eared slider, 23 (10-114). Age determination proved to be problematic. Estimates for growth rates were determined for red-bellied cooters. However, due to small sample size and the short time span over which the study was conducted (29 capture days) these estimates are suspect.

Psychology

STORIES OF BYSTANDER INTERVENTION FROM ACROSS THE GLOBE. S.Y. Teie, P. Randall, R. Wallace & B. Rivero, Center for Applied Behavior Systems, Department of Psychology, Virginia Tech, Blacksburg VA 24060. Actively Caring for People (AC4P) wristbands are used to recognize others for performing prosocial behavior. In 2011, the website AC4P.org was launched to provide a public space for individuals to share their experiences around AC4P wristband recognition. 74.4% of wristbands were passed by beneficiaries of kind acts who reciprocated with the wristband (Reciprocators), and 24.6% of wristbands were passed by observers of kind acts who intervened with the wristband (Bystanders). The qualitative analysis of AC4P stories revealed a differentiation between stories about wristbands passed by Reciprocators and those passed by Bystanders. Future research will explore gender interactions using larger sample sizes.

A BEHAVIOR-BASED INTERVENTION TO INCREASE PROSOCIAL RECOGNITION IN AN ORGANIZATION. K. M. Pacque, S. M. McCarty, S. Butterworth & C. Holmes, Department of Psychology, Va. Polytechnic Inst. & State Univ., Blacksburg VA 24061. Today's fraternal culture needs more caring, compassionate, and interpersonal relationships. News reports document problems from binge drinking and sexual assault charges, to the death of organization members from hazing. 73 students in a Greek fraternity received an Actively Caring for People (AC4P) intervention and used Twitter to recognize prosocial behavior. Students self-reported frequency data and relational data on behaviors and relational ties, respectively. Social network analysis (SNA) and multiple regression analyses assessed

influence ties, power ties, influence centrality, and power centrality on performance of recognition. Additionally, in- and out-degree ties of Aristotle's three variations of friendship predicted organization members' sense of organizational belonging to the fraternity. In general, multiple regression models with SNA measures predicted AC4P-related behaviors better than frequency ties alone. Only friendships based on "goodness" predicted students' sense of belonging in their organization.

A BULLYING-PREVENTION INTERVENTION FOR MIDDLE SCHOOLS: PROMOTING AND REWARDING PROSOCIAL BEHAVIOR TO REDUCE AGGRESSION. B. Tarzia, L. Anderson, G. Yam & M. Armstrong, Center for Applied Behavior Systems, Department of Psychology, Virginia Tech. This paper discusses the development of an Actively Caring for People (AC4P) approach to reduce bullying in middle schools. An intervention teaching character strengths enabling students to demonstrate discretionary, prosocial behavior is likely to have positive outcomes. An assessment was conducted to evaluate the relationship between identified AC4P character strengths and positive outcomes across two schools in Southwest, VA. Students were asked to score their subjective well-being, hope, gratitude, self-efficacy and self-esteem, as well as their involvement in bully-victim behavior and discretionary, prosocial behavior (i.e. AC4P behavior). Using regression analyses, students' self-reported scores in hope, gratitude and self-efficacy were analyzed. Hope and gratitude were significant predictors in whether or not they participated in bullying and/or victimizing behavior. In regards to AC4P behavior, hope was a significant predictor for both performing and receiving AC4P behavior. A one-way ANOVA was run with Tukey's post hoc breaking down students' bullying behavior by category (i.e. uninvolved students, bullies-only, victims-only and bully-victims). Students' self-reported "hope" scores were significantly different in all three bully-behavior categories (i.e. bullies-only, victims-only and bully-victims) from uninvolved students.

THE EFFECT OF NEGATIVE AFFECT ON VISUAL SEARCH PERFORMANCE WITH AND WITHOUT AUTOMATION. Clinton Carter, Rachel R. Phillips, & Poornima Madhavan, Department of Psychology, Old Dominion University, Norfolk VA 23529. To examine the impact of affective valence on threat detection performance with and without automation under different levels of uncertainty, participants completed a visual search task in which they had to identify foe presence or absence in synthetic aperture radar images. Participants consisted of 67 students (23 males, 44 females) between the ages of 18 and 51 (M = 21.27, SD = 5.84) from a large southeastern university. Participants were randomly assigned to one of two affective valence conditions (negative or neutral) and one of two automation conditions (no automation or perfect automation) and completed the visual search task with both easy and difficult images. A series of 2 automation x 2 affective valence x 2 task difficulty mixed factorial ANOVAs were conducted for the dependent variables of sensitivity, response bias, and confidence. Results revealed that there was a significant interaction between affective valence and automation for response bias. Specifically, in the negative condition, response biases were similar between those who received the assistance of the automation and those who did not. However, in the neutral condition, those who received the automation were more liberal than those who did not receive the automation. These participants also reported the highest confidence and were part

of the most sensitive group. These findings suggest that participants in the negative condition may have utilized the aid less than those in the neutral condition. This indicates that the potential emotional experiences of an operator should be considered when determining when and where to integrate automated decision aids.

HOW THE FRAMING OF METAPHORS AFFECTS PUBLIC POLICY TOWARD THE MENTALLY ILL. Victoria E. Bennett & Della N. Gibson, Department of Psychology, University of Mary Washington, Fredericksburg, VA 22401. Metaphors have been shown to influence people's decisions about campaigns, ads, and politics. Specifically, studies have looked at how metaphors have influenced attitudes toward crime and obesity. We examined the effect of blaming and victimization metaphors on public policy attitudes toward the mentally ill. It was hypothesized that victimization metaphors, as compared to blaming metaphors, would lead to increased support of outpatient treatment, increased support of government funding, and increased support of rights and opportunities for the mentally ill. The results showed no significant differences between the three conditions. Additionally, metaphors may not influence people with strongly held beliefs toward an issue.

A CONCEPTUAL MODEL FOR BYSTANDER INTERVENTION: EXPANDING PROSOCIAL BYSTANDER BEHAVIOR. M. Sihalath, B. Wright, P. Pierucci & R. Cobb-Ozanne, Center for Applied Behavior Systems, Department of Psychology, Virginia Tech, Blacksburg VA 24060. The frequency of bullying and interpersonal violence remains high throughout our culture. In these situations where intervention is needed, bystanders play a vital role in potentially reducing interpersonal violence. Bystanders in emergency or violent situations choose whether or not to intervene for the prevention of harm and/or injury. This extends the bystander intervention model from the prevention of interpersonal harm to the promotion of prosocial behavior. Participants were given green wristbands to recognize desirable prosocial behavior and were measured on the four factors from the Latané and Darley model (i.e., "notice", "interpret", "responsibility", and "skills"). In regards to predicting prosocial recognition, the results suggest "responsibility" and ability to "interpret" were significant predictors. In regards to predicting intention to intervene, the data suggests "notice" to be a significant predictor.

Statistics

STATISTICAL PREDICTION FOR VIRGINIA LYME DISEASE EMERGENCE BASED ON SPATIAL-TEMPORAL COUNTS DATA. Yuanyuan Duan[1], Jie Li[1], Yili Hong[1], Korine N. Kolivras[2], James B. Campbell[2], Stephen P. Prisley[3] & David N. Gaines[4],[1] Department of Statistics, Virginia Tech, Blacksburg, VA 24061[2], Department of Geography, Virginia Tech, Blacksburg, VA 24061, [3]Department of Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA 24061 & [4]Virginia Department of Health, Richmond, Virginia 23219. The emergence of infectious diseases over the past several decades has highlighted the need to better understand and prepare for epidemics as endemic infectious diseases. These diseases are usually expanding their geographic range and are recorded over multiple time periods, making