11th Annual Psychology Undergraduate Research Conference

Purdue University Psychological Sciences

- April 17, 2013
- East & West Faculty Lounge Purdue Memorial Union
- 11 AM to 1 PM
Welcome to the Eleventh Annual Psychology Undergraduate Research Conference. This event showcases independent research projects conducted over the last year by our undergraduate majors. The conference originated in concert with the department’s Research-Focused Honors Program in which students spend three semesters learning about all facets of the research process: developing testable hypotheses, reviewing background literature, implementing the project, collecting and analyzing data, presenting their findings at an open forum, and summarizing their work in a form suitable for publication. Participation in this yearly event has since been broadened to include other talented undergraduates who have conducted independent research with the guidance of a faculty mentor.

Congratulations to all of this year’s participants. As you’ll see, their presentations cover a wide variety of topics, reflecting the diverse research interests within psychological sciences. These students have worked long and hard on their projects and on preparing for today’s presentation. They will be delighted to talk with you about their work — please engage them in discussion.

We thank them and their faculty sponsors for their efforts and for giving us the opportunity to showcase the accomplishments of these outstanding students. Thank you for joining us.
Program

Social Time/Refreshments..............11:00 - 11:15 am

Introduction and Opening Remarks
Professor George Hollich ..............11:15 am

Poster Presentations..................11:30 am

Closing Remarks ......................1:00 pm
<table>
<thead>
<tr>
<th>No.</th>
<th>Presenter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lena Gerber</td>
<td>Agreeableness as a predictor of forgiveness among third-party transgressions</td>
</tr>
<tr>
<td>2</td>
<td>Stephanie A. Larson</td>
<td>It's not stalking if...: The effects of sexual orientation, perpetrator-target relatedness, and gender on perceptions of stalking behavior</td>
</tr>
<tr>
<td>3</td>
<td>Jenna R. Lee</td>
<td>Gastrointestinal inflammation induced by high fat diets</td>
</tr>
<tr>
<td>4</td>
<td>Krystal McGlaun</td>
<td>The effects of subtitles on subject matter comprehension in English language video</td>
</tr>
<tr>
<td>5</td>
<td>Jonathan Oskvarek</td>
<td>Moderating aggression: The effect of attitudes toward violence on the provocation-aggression relationship</td>
</tr>
<tr>
<td>6</td>
<td>Laurel Poston</td>
<td>Individual differences in locus of control and the effectiveness of structured retrieval activities</td>
</tr>
<tr>
<td>Poster No.</td>
<td>Presenter</td>
<td>Title</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Ryan Stout</td>
<td>Effects of vision on action-specific perception in Fitts' one dimensional aiming task</td>
</tr>
<tr>
<td>8</td>
<td>Elizabeth Trancik</td>
<td>Not knowing their language may make you feel less ostracized: A moderating role of openness in the presence of linguistic ostracism</td>
</tr>
<tr>
<td>9</td>
<td>Kyle Ward</td>
<td>Does reading a background text enhance retrieval practice?</td>
</tr>
<tr>
<td>10</td>
<td>Chelsea Weber</td>
<td>The effects of working in a diverse group on individual subjective experiences</td>
</tr>
</tbody>
</table>
**Lena Gerber**  
*Mentor: William Graziano, Ph.D*

**Agreeableness as a Predictor of Forgiveness among Third-Party Transgressions**

The third-party forgiveness effect states that a participant's willingness to forgive is higher when a transgression is made against the participant than when a transgression is made against the participant's friend. Researchers found this effect was mediated by closeness to transgressor. The current study extends this research by measuring forgiveness when the participant is equally motivated to maintain positive relationships with both the victim and the transgressor. Agreeableness was also measured as a potential predictor of forgiveness. Participants in Study 1 read a vignette from each of the four conditions and completed forgiveness measures. Results suggest that forgiveness is highest when both the victim and transgressor are friends of the participant. Study 2 expanded these findings by placing participants in a laboratory setting and manipulating them to believe a group member had completed a negative evaluation of either the participant or another group member.

**Stephanie A. Larson**  
*Mentor: Susan South, Ph.D*

**It's not Stalking if...: The Effects of Sexual Orientation, Perpetrator-Target Relatedness, and Gender on Perceptions of Stalking Behavior**

According to the 2010 National Intimate Partner and Sexual Violence Survey, approximately 1 in 6 women and 1 in 19 men have experienced stalking at some point in her or his lifetime. Stalking is a dangerous and highly prevalent behavior, but people do not often recognize it as such. Therefore it is important to understand factors that might affect whether behavior is perceived as stalking. The purpose of this experiment was to examine the effect of sexual orientation, gender, and perpetrator-target relatedness on perception of stalking behavior in an undergraduate sample. Participants were presented with a vignette that depicted a stalking situation; sexual orientation and perpetrator-target relatedness were manipulated within each vignette. Contrary to expectation, the sexual orientation of the individuals in the vignette did not affect perceptions of stalking. Findings are discussed with regard to what future work can do to raise awareness of stalking behavior.
Feedback circuits between the gastrointestinal tract and the brain are vital for the regulation of food consumption. It has been hypothesized diets high in fat induce inflammation in tissue essential for caloric regulation, causing a disturbance in patterns of food consumption and contributing to the development of obesity. In this experiment we measured levels of inflammation in three regions of the intestines of rats fed on long-term control chow, 10% fat, or 45% fat diets. We monitored food intake, assessed patterns of consumption, tracked body weight gains and fat for all three groups. We found significantly increased levels of inflammation in the 10% and 45% fat groups compared to the chow controls. The amount of inflammation was also influenced by the location along the gastrointestinal tract. Patterns of consumption such as number of meals a day, calorie intake per day, and satiety ratio, as well as changes in body weight and body fat, were statistically different based on diet condition. The results are consistent with the hypothesis that high fat diets disturb food intake control and body weight regulation by producing inflammation in the gastrointestinal tract.

Online and hybrid-style classes, or those in which instructors use online videos to present new material instead of physically lecturing in front of students, have become more common in recent years. While watching these videos, students may have the option to simultaneously view subtitles. This may be particularly helpful to students who do not natively speak the language in which the class is being taught. In this experiment, native English speakers and native Chinese speakers watched three English language video segments taken from elementary psychology lectures. One segment had no subtitles, one had English subtitles, and one had traditional Chinese subtitles. A free recall section and multiple-choice comprehension test were administered to the participants after each video. Preliminary results show that viewing English captions is correlated with higher performance on multiple-choice tests for both native English speakers and native Chinese speakers.
Moderating Aggression: The Effect of Attitudes Toward Violence on the Provocation-Aggression Relationship

Attitudes often predict behavior, but implicit measures, rather than explicit questionnaires, might better predict socially stigmatized behaviors, such as aggression (Scott & Straus, 2007). Eckhardt et al. (2012) established that behavior predicts implicit attitudes toward the use of violence (ATV) in maritally violent criminals. This study examined ATV for their effect on the provocation-aggression relationship, which may be more attenuated in intimate partner-violent samples. Participants listened to and imagined themselves in a provoking scenario and placed pins in a voodoo doll as a measure of aggression. The paradigm allows for real-time measurement of aggression directed toward the partner or interloper (Slottier et al., 2012). Explicit measures of attitudes were compared to the implicit test. Provocation led to more pin placement in the doll. More positive ATV led to increased behavioral aggression. Thus, ATV appears to moderate the provocation-aggression relationship. Also, the implicit test predicted violence better than explicit measures.

Individual Differences in Locus of Control and the Effectiveness of Structured Retrieval Activities

Little work has investigated the relationship between individual differences and the effectiveness of retrieval-based tasks. We examined the relationship between students' locus of control and the level of structure afforded by a retrieval practice activity, where locus of control refers to whether students attribute the outcome of events to internal or external factors. Participants studied educational texts and then practiced retrieval by completing either a structured map, in which concepts were provided with blank linking phrases in place, or an unstructured map in which concepts were provided but linking phrases were not in place. Learning was assessed on an immediate free recall test. Practicing retrieval enhanced learning relative to a study-only control condition. The structured activity led to superior recall for the externals relative to the unstructured activity. Externals performed similarly in both the unstructured and study-only conditions. These results suggest that one's locus of control influences the effectiveness of structured or unstructured retrieval activities.
Ryan Stout  
Mentor: Howard Zelasnik, Ph.D  
Effects of Vision on Action-Specific Perception in Fitts's One Dimensional Aiming Task

Previous research on the action-specific account of perception suggests that our performance on certain tasks can affect our perception of the relevant aspects of the task. However, the participants in previous experiments testing the action-specific account of perception have always had some knowledge about how well they are performing on a given task, either from their own observations or from an experimenter informing them of how well they are performing. This experiment seeks to determine whether the aforementioned effect of performance on perception is still observable when the participant is not aware of how well they are performing on a given task. In this experiment we used a modified version of Fitts's one-dimensional aiming task. Participants' vision and the difficulty of the task were manipulated. Participants completed an object selection task to measure perceived size of the target after completing 25 Fitts's aiming task trials at each of the four difficulty levels. Difficulty was manipulated by changing the movement distance between the starting point and the target. Participants performed the Fitts's aiming task at each of 4 distances: 5, 10, 20, and 30 centimeters. The relationship between perceived object size and performance on the Fitts one-dimensional tapping task is examined.

Elizabeth Trancik  
Mentor: Sang Eun Woo  
Not Knowing Their Language May Make You Feel Less Ostracized: A Moderating Role of Openness in the Presence of Linguistic Ostracism

As the world is becoming increasingly globalized, there are more social, work interactions with different cultures and languages. Individuals may feel excluded due to the language barrier, or linguistic ostracism, which describes any situation where people converse in a language that others do not comprehend. This study examined the moderating role of individuals' openness in the presence of linguistic ostracism. Using a between-subject design, we compared the extent to which ostracism has negative effects on various outcomes under two different conditions: being ostracized with a language barrier (i.e., linguistic ostracism condition) versus being ostracized without a language barrier (i.e., regular ostracism condition). In both conditions, each participant was excluded from a 5-minute social conversation when placed in the same room with two other Korean confederates before the three-team group engaged in an online “problem solving” discussion task together. We hypothesized individuals with higher levels of tolerance (an Openness facet) would feel less ostracized and give less negative team evaluations in the linguistic ostracism condition.
**THE HADLEY AWARD**

Dr. John Millard Hadley was a Professor in the department from 1946 until 1970. Professor Hadley was the first Director of Clinical Training at Purdue and later served as the second Head of the Psychology Department. It was under his leadership that the Purdue program in clinical psychology was to reach national prominence in research, clinical training, and service. The award that bears his name is given each year to a senior Psychology major at Purdue who has demonstrated excellence in research activities. Since 2003, the award is given to the senior presenting the best research at the Undergraduate Research Conference. Winners are recognized by having their names inscribed on a plaque that hangs in the department, a letter of recognition, and a cash award of $300.

**Past Hadley Award Recipients:**

- **2003** Alma Haas
- **2004** Ashleigh Maxcey
- **2005** Emily Gurry
- **2006** Amanda Kilavos
- **2007** Bethany Edwards
- **2008** Nicole Weatherman
- **2009** Megan Smith
- **2010** Judith Asem
- **2011** Caroline Johnson
- **2012** Afrida Rahman

**Special Thanks To:**

- Professors Jeffrey Karpicke, Ximena Arraga, Kipling Williams, James Nairne for conducting the Honors seminars.
- Peter Urcuioli for his service as Undergraduate Director.
- The faculty mentors for their support of undergraduate research.
- Christopher Agnew, Head of Department, for the financial support of undergraduate research and this yearly event.