

RESEARCH-TEAM PROJECTS

(Psychology 491-492)

2019-2020

Mindy Erchull

Over the last few years, I've become more interested in factors that impact how we perceive others. I am especially interested in factors that influence the way we perceive women. As both a scientist and a gender studies researcher, I am also interested in the way people perceive scientists, professors, etc. who publically apply their knowledge and training to culturally relevant issues like global warming, gender equity, etc.

Some research has indicated that activism tied to one's academic training and professional doesn't significantly change perceptions of people's professionalism, for example. However, this very limited body of research hasn't looked at the impact of different aspects of social identity (e.g., gender, race/ethnicity) or the particular area of scientific expertise. Since identify variables do impact how we perceive others in many different domains, it's likely they are important to consider here as well. It may also be the case that a biologist commenting on the impact of pollution on a local ecosystem is still viewed positively, but a gender studies professor challenging the appropriateness of a policy that disproportionally affects people of a given gender is not given the same leeway to apply their expertise in these public contexts.

There are many possible directions this research could go, and I look forward to collaborating with a group of enthusiastic students to develop these ideas. In the past, my teams have been very successful in presenting the work we do together at national conferences as well as publishing in peer-reviewed journals. This will be a goal I have for my team next year as well.

Dave Kolar

Human actions are causing harmful changes to the environment and researchers have called for social scientists to more closely examine how human behavior impacts the environment as well as what people can do to help conserve the environment. Next year my research team will focus on how we can take what we know about psychology and apply it to issues related to the environment. In previous years my research teams have studied a variety of things related to the environment including food waste, water use, and attitudes about the environment. I am open to doing research in any area related to environmental issues and psychology next year and will leave the exact nature of the research up to the students working with me. Please note that you don't have to be an expert on environmental issues to be on my team, but you should be interested in them. Some possible questions/areas include: 1) Overconsumption: People in the U.S. buy more products and consume more resources than most other countries. Why? What can we do to change this? 2) Why are some people more concerned about the environment than others? 3) How can we change behaviors related to the environment? 4) How do attitudes about the environment develop? 5) How do others influence our attitudes about the environment? 6) An applied study with a local non-profit environmental organization.

Jennifer Mailloux

Recently, I have been studying how certain variables are related to sexual satisfaction using self-report data. One of the variables I have studied is cognitive distraction during sexual activity. Individuals can be distracted during sex by focusing on whether one's body will look pleasurable to one's partner and/or whether one will behave in a way resulting in one's partner's sexual pleasure. Distracted individuals may not focus on themselves, including the pleasurable sensations and feelings that may occur during sex, which may result in low sexual satisfaction. Other variables that I have investigated and that appear to be positively related to sexual satisfaction include body esteem and mindfulness. This is not an exhaustive list of variables that can influence sexual satisfaction! Furthermore, I have limited my research to heterosexual, college-aged women. So, there are a lot of directions to go with this research, including examining other types of variables (behavioral or physiological) that might influence sexual satisfaction as well as how all of these variables influence sexual satisfaction in individuals other than heterosexual, college-aged women.

Patrick Rich

Do camels store water in their humps to survive the desert? Though many people continue to believe that camels' humps store water, they are instead made of fat. Why are such misconceptions so difficult to correct? How can we increase the effectiveness of these corrections? My research focuses on the role of memory in correcting misinformation and common misconceptions. For the fall, I have two main areas of research I would be interested in pursuing. First, I have been looking at people process and correct standalone "headlines" or "tweets" containing mistaken information. I have been investigating the factors that influence how much people change their misconceptions after receiving a correction. As a group, we will choose which of these topics to focus our efforts and potential research questions.

Holly Schiffrin

In the past, my research teams have focused on two primary topics including positive psychology and parenting issues. The goal of positive psychology is to identify and enhance the human strengths and virtues that make life worth living and allow individuals and communities to thrive. One potential project would be to follow up on research I have conducted on the impact of intensive and helicopter parenting practices on the well-being of both parents and children. Some potential questions could include examining (1) the impact of helicopter parenting on their children's mindsets; (2) the impact of helicopter fathering on father and child outcomes; (3) the impact of helicopter parenting on male versus female children; or (4) the impact of "helicopter professorship" (expanding the concept of helicopter parenting to a new group). The project pursued will depend upon the research interests of members of the team. Whatever the final topic, I am interested in working on applied issues related to well-being that have practical applications. My research team will be involved in designing the study as well as developing data collection instruments, collecting data, analyzing data, as well as writing reports and making presentations to summarize the findings. Depending on the outcome of the study, we may also submit the results of our investigations for presentation at a national conference or publication in an appropriate journal. If you have questions or are interested in learning more about these projects, stop by my office (Mercer 329) or send me an e-mail (hschiffr@umw.edu).

Emily Stanley

When people make mistakes their brains produce a corresponding potential that can be recorded using electroencephalography (EEG). This mental “oops” is called the error related negativity (ERN) and it can be larger or smaller depending on the significance of the mistake to the person. For example, if someone is watching you make a mistake your brain will produce a larger ERN than if you make a mistake while you are alone. Also, some people tend to produce larger ERNs than other people. People who worry a lot or report obsessive and compulsive symptoms produce larger ERNs than non-anxious people.

While ERN differences have been found for various psychological disorders, less is known about variation in the ERN that may correspond to the normal range of personality traits. In the past, my research teams have explored the relationship between the ERN and perfectionism and looked at the ERN in people who meditate. I’m open to continuing to continuing a similar line of research or looking at error monitoring associated with a different trait.

There have also been a few recent studies that have explored using interventions such as expressive writing to reduce the ERN in anxious people. I’d also be open to a study that tries to understand why those interventions have an effect on error monitoring.

I’m looking for students who are interested in learning more about the recording of brain activity using EEG and how that activity corresponds to different psychological phenomena. And specifically interested in studying error monitoring and traits or possibly studying interventions that affect error monitoring.

Hilary Stebbins

Chronic sleep deprivation is pervasive in college populations and has numerous negative effects on cognitive and emotional processing. For example, sleep deprivation has been linked to the maladaptive use of emotional regulation strategies, which can lead to exaggerated responses to both negative and positive experiences. Our response to positive and negative outcomes is important because we know that we can learn from them via the dopamine reward system. Differences in dopaminergic activity have been linked to differences in performance on learning tasks that involve positive and negative outcomes. In past years my team has done work connecting dopamine and sleep deprivation. For example, we found that striatal dopamine levels mediate the relationship between sleepiness and impulsivity. My interest for the 2019 – 2020 year is to continue to examine how chronic sleep deprivation interacts with dopamine levels to influence cognitive processes. Students on my team will help in the process of reviewing the literature on both sleep deprivation and dopamine mediated learning to develop a specific research question. We can measure chronic sleep deprivation via a number of surveys that have been developed to assess sleepiness, sleep quality, and sleep patterns. Students who work with me will also learn how to use our physiograph equipment to measure electrooculography (EOG; eye movement) in order to quantify the spontaneous eye blink response, which is a marker of striatal dopaminergic activity. We will work as a team to design studies to investigate the specific research questions we develop as well as to analyze, write up, and present the results of our studies. You do not need to have a strong background in biology to work on this project, but you do have to be motivated to learn about these variables and be committed to doing experimental work in the lab. In the past, motivated students who have worked with me have attended national conferences to present our work. If you have questions or are interested in learning more about these variables, stop by my office (Mercer 328) or send me an e-mail (hstebbin@umw.edu).