DIVISION NEWS

September 22, 2021
Psychology Divisional Newsletter
A Publication of a Division of the Council on Undergraduate Research
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The Psychology Division of the Council on Undergraduate Research provides networking opportunities, activities, and resources to assist psychology administrators, faculty members, students, practitioners, and others in advancing undergraduate research.

Chair: Karen L. Gunther (Wabash College)
Newsletter Team: Amy M. Buddie (Kennesaw State University); Tsu-Ming Chiang (Georgia College & State University)

Welcome from the Chair

After a decade as a CUR Councilor, I finally stepped up to chair the Psychology Division. Part of my willingness to do so was knowing how energetic and supportive the rest of the division is—thanks to everyone for making this crazy pandemic year productive!

I hope you have all been able to remain as safe as possible this year and have had a chance to get your vaccines! (Why not take this chance to employ psychological principles and norm this pro-health behavior?)

This issue of the CUR Psychology Division newsletter features:
• Interviews with last year's research and travel awardees.
• Details on the work of 2021 Posters on the Hill presenters.
• Information from Councilor Jennifer Coleman on an upcoming book about conducting remote undergraduate research.
• Upcoming CUR Conversations on remote undergraduate research.
• Biannual mentor recognition award.
• Upcoming yearly research/travel award offering.

Be sure to check out the Psychology Division Webpage, watch for occasional communications through the CUR Community, and follow us on Facebook and Twitter. I wish you a safe and productive 2021–2022 academic year, as we continue to work our way out of the COVID-19 pandemic.

Karen L. Gunther
Associate Professor of Psychology
Wabash College

Division Events and Deadlines

CUR Conversation—You Can Take It with You: Reimagining Undergraduate Research by Carrying

Remote Learning Insights Forward | *June 2, 2021, 2:00 pm–3:00 pm (ET)*
How should we move forward after a year of remote learning experiences? Certain remote and virtual research experiences might just be worth carrying forward. Join us for a chat about "re-entry" into the fall by discussing the pleasant surprises discovered in the last year toward broadening student access to and inclusion in UR. **Register >>**

CUR Conversation—Techniques and Tools for Remote Research across the Curriculum | *July 14, 2021, 2:00 pm–3:00 pm (ET)*
Faculty have used multiple tools and techniques to continue research with undergraduates remotely over the past year of pandemic restrictions. Further, some faculty mentor distant students in research regularly using these strategies and resources. Let's share what is particularly effective for use across the curriculum. Register >>

CUR Psychology Division
Mid-Career Mentoring Award Nominations
Deadline: October 15, 2021
The Psychology Division of the Council on Undergraduate Research invites nominations for a Mid-Career Mentoring Award. A description of the award and a portal for uploading nominations are available **here**.

Questions may be addressed to any member of the Mid-Career Mentoring Awards Committee:
Sarah K. Johnson | johnsons@moravian.edu
Nestor Matthews | matthewsn@denison.edu
Joanne D. Altman | jaltman0@highpoint.edu

Research & Travel Awards

For the past several years, the CUR Psychology Division has offered travel awards for students presenting their research at conferences. (The students' mentors or their institutions must be CUR members.) This year, due to the pandemic, many conferences were canceled or went virtual, obviating the need for travel funds. Thus, the travel awards were transformed to include funding to conduct the research itself. Below are synopses from this year's winners—they are inspiring to read! Award details for the upcoming year will be announced in the fall.

Postpartum Body Image

Rachel Blickman, Boise State University
Mentor: Mary Pritchard

1. What was the nature of your project?
The postpartum period is a time of great change for new mothers and is associated with concerns with body image. Stretch marks, in particular, represent a permanent alteration to the skin that women must evaluate both physically and psychologically following childbirth. Despite stretch marks being extremely common among women of all ages and racial and ethnic backgrounds, very little is known of the effect of stretch marks on women in the postpartum period already vulnerable to developing negative body image. I therefore felt it was important to address the disparity between the high prevalence of stretch marks and the limited body of research about their psychological impacts. I took a qualitative approach to examining this realm of postpartum body image and felt it necessary that women share their experiences of new motherhood in their own words.

2. What were the easiest and hardest things about the work you did?
I am a mother of two children aged two and four, and felt an immediate connection with the nature of this study. I recall feelings of unpreparedness for the physical changes that took place in the postpartum period

and also unsureness of how to evaluate my emotions toward those changes. I therefore felt very passionate about contributing to this small yet emerging body of research that might provide clarity for future mothers and the professionals who guide them.

Of course, this close connection to the study also challenged me to remain as unbiased as possible as I designed the questions for the focus group and especially during data analysis. It was a strong reminder of the important separation of my role as a researcher and my own lived experience of motherhood. This was tough at times, and I am so grateful for my incredible mentor and faculty supervisor, Dr. Mary Pritchard, who helped guide me through the emotional process of examining a space to which I felt deeply connected while always maintaining my highest integrity as a researcher.

I would be remiss not to mention the impact of COVID-19 on this project. My initial intention was to host the focus group in person to achieve a natural conversation between participants. Of course, this was no longer an option given the pandemic, and I quickly needed to decide on a safe and effective path forward. After considering the pros and cons of hosting the focus group on a social media platform, I ultimately decided to build an independent website where women could interact completely anonymously. Thankfully, my tech-savvy husband was there to support me in my first experience of building a website! Looking back, I am happy to have made the choices I did and feel that an anonymous approach may have helped women to feel more comfortable when speaking about something as personal as body image.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)
I learned so much from this study! First, I was thrilled to discover that women want to talk about their feelings toward their postpartum bodies. In two weeks, the initial screener survey used to recruit women for the focus group received 530 responses! It was an incredible reminder of how important it is to represent the voices of new mothers in research that holds the potential to influence how medical and mental health practitioners prepare pregnant women for the realities of the postpartum experience.

In addition, I validated for myself that research is something I love to do. From thinking creatively about research design to problem-solving through unforeseen roadblocks, I felt such pride in the work I was doing and the findings I hope to put into the world. I now hold a deepened respect for the role of a researcher and cannot wait to continue with future projects in graduate school and beyond.

4. Did you make any discoveries along the way?
I was surprised to discover that the participants in the focus group felt rather indifferent toward their stretch marks, with the majority of women feeling more dissatisfied with weight-related changes during the postpartum period. This was interesting to me and also indicative of the internal and external pressures that many new mothers experience to "bounce back" to their pre-baby bodies. Given that women's perceptions of their stretch marks did not appear to influence feelings toward their bodies as much as I had expected, I am eager to examine other factors that might play an influential role such as partner support.

5. How has the project helped you in your career goals?
This fall, I will begin a PhD program in human development and family sciences at the University of Texas at Austin (UT-A). It is my intention to train for a career in marriage research and help contribute to the ever-evolving understanding of what makes for happy and healthy relationships. I submitted the project proposal for this study as part of my application to the program, and one researcher at UT-A was excited to share in my interview that she, too, is interested in examining postpartum body image within the context of the relationship. I could not believe it! We spoke enthusiastically about ideas for research, and she will now be a co-mentor of mine as I move through the doctorate program. This project has also inspired me to consider other moments in a person's life where they might experience significant physical changes and seek body-related emotional support from a partner such as menopause or treatment of an illness. I am thrilled to be working with a second mentor at UT-A, who examines couples as they age and who I hope will guide me in the exploration of these interesting spaces.

Not only has this project enlightened my understanding of the research process but also has helped to illuminate my path forward as a researcher and the meaningful work I hope to achieve.

Racial Biases and Language

Alexis Cheatham, Franklin College
Mentor: Dr. Ryan Rush

1. What was the nature of your project?
My project examined how comfortable participants would be when the n-word was presented in different situations and in the presence of either a Black or white researcher.

2. What were the easiest and hardest things about the work you did?
The hardest, or perhaps most frustrating, part of the project was getting IRB approval. During the pandemic, the chair of the IRB contracted COVID-19 and was in recovery for several months. As a result, the IRB was left without guidance, and my proposal got lost among other things, resulting in a very long delay in receiving approval. Although frustrating, I practiced patience, used the time to work on other aspects of the project, and learned how to work through unexpected difficulties. The easiest part was collecting data. Since we used MTurk, I did not have to collect data in person and set time aside in my schedule to run trials. I just had to post the trial on MTurk and let people take it online.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)
This project produced a lot of interesting results. However, there were two results I found most interesting:
(a) The results suggest that exposure to racial slurs is related to desensitization in the individual. Participants who reported greater experience with racial slurs were more comfortable reading the scenario, suggesting that increased exposure and experience with racial slurs may desensitize individuals to future exposure to such language.

(b) The researcher's race affected the participant's comfort level. The comfort of participants with the Black researcher was stable, whereas participants with the white researcher were less comfortable when the n-word was present, suggesting that being primed by a white individual may increase awareness and discomfort of racially charged language.

4. Did you make any discoveries along the way?
I learned that research takes longer than expected. There were times where I had to be flexible because things were not happening at the speed I wanted. The IRB took longer than anticipated, so I had to find other things to work on while I waited for approval to collect data. Additionally, when I did collect data, we had some technology complications and had to throw away a lot of data as a result. I quickly learned how to be patient and realized that some things are out of my control when it comes to research.

5. How has the project helped you in your career goals?
I hope to work directly with underrepresented populations in the future, as well as with groups that advocate for social justice. I am a Black, queer woman, so I have personal experience with stereotypes and discrimination. Research like this helps illustrate the experience of marginalized groups. Understanding this experience, through conducting and reading research, is essential for working with underrepresented minority groups. For those who do not experience this type of discrimination, it can help promote awareness, understanding, and empathy to those that do.

Providing Health Care to the Hispanic Population

Denver Dobson, Idaho State University
Mentors: JongHun Sung, Karen Appleby

1. What was the nature of your project?
The purpose of this research project was to identify barriers and cultural beliefs

that need to be addressed to eliminate discrepancies in health care for the Hispanic population within the United States.

2. What were the easiest and hardest things about the work you did?
The easiest thing about the project in my opinion was conducting the interviews with the health-care professionals, which was an effective and efficient means of clarifying past research findings. The aspect of the project I found most difficult was the IRB (Institutional Review Board) certification process, which I feel I much better understand now after going through this process.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)
This project afforded me knowledge of the research process and all that comes with it. I am extremely grateful for my mentors, Dr. JongHun Sung and Dr. Karen Appleby, who helped me throughout this entire process. Thanks to them and the support of CUR through a generous scholarship, I feel well prepared and equipped to continue my pursuit of bettering this research project and begin other research projects as well.

4. Did you make any discoveries along the way?
The major finding from this research study is the prevalence of the trust barrier that prevents Hispanic patients from receiving the health care they need. This study really clarified to me the impact that this often overlooked barrier has in the health-care world.

5. How has the project helped you in your career goals?
As an aspiring physician, I feel the knowledge I have obtained will help me better serve my future Hispanic patients. These health-care discrepancies are very prevalent, but I feel it is an issue that some view as unsolvable. However, I hope my efforts can produce ideas and solutions that people can put into practice to actively put an end to these health-care discrepancies.

Gender Identity as a Spectrum and Math Attitudes

Emily Knopf, University of Chicago
Mentor: Susan C. Levine

1. What was the nature of your project?
My project is about understanding how math attitudes (such as math anxiety and stereotypes about gender and math) vary along the spectrum of gender. Previous work has only examined how math attitudes differ according to binary gender, and this is often used as an explanation for societal gender inequalities such as the STEM gap. However, this project is the first to examine how math attitudes differ when we look at gender as a multifaceted variable, including not only simple identification (of male, female, nonbinary, etc.) but also gender expression (stereotypically gendered) personality traits and where people would mark themselves on a line from male to female. This allows us to examine if certain aspects of gender are more correlated with math attitudes than others and to include those who do not identify within the binary in studies of math attitudes. Ultimately, in order to address problems like the STEM gap, we need to consider how it impacts not just men and women but also all the people somewhere in between.

2. What were the easiest and hardest things about the work you did?
The easiest thing about my work was getting excited about my idea. This project has a personal connection

to me as a woman (with a multifaceted gender identity like everyone else!) in science who has had many insecurities and anxieties about my own math skills throughout my life. It's amazing to get to work on something that feels so personally important and relevant and to be able to build on the groundbreaking work of my adviser, Professor Susan Levine.

The hardest things were having to completely scrap my original idea, which involved working with kids in person, due to the pandemic; trying to figure out how to measure gender; and doing all of it on my own. I was very lucky to have very supportive graduate students and faculty, but this was my first time conceiving of an original idea, doing all of the background research, recruiting the participants, and doing all of the analyses with the hope of contributing to the field by myself from start to finish. However, though it was extremely hard, I've learned so much.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)
I learned that gender is ever-evolving and complex and that there will never be a way to capture it all at once. I also now understand how little time a year is to do an entire research project and that we can learn as much from what did not work as from what did. On a personal level, I learned that I really love research and that I have the grit and passion to do it. I think it's challenging and so fun to figure out which questions about human behavior we don't understand, and I enjoy the creativity involved in figuring out how to measure a question.

4. Did you make any discoveries along the way?
I discovered that, when given the opportunity, people will often define their gender as something other than 100 percent male or female and that we need to figure out ways to measure concepts of self that are fluid and contribute to our choices and behavior. I'm currently in the throes of data analysis, but preliminary analyses are suggesting that gender identity is likely a predictor of math anxiety, which I hope will be confirmed with more data!

5. How has the project helped you in your career goals?
This project has empowered me to hopefully pursue a PhD in psychology, making me feel more confident that I can handle the unpredictability inherent in the research and the persistence necessary to keep trying. Doing this research gave me so many other ideas of more questions I want to ask and experiments I want to design. It showed me that often research ideas come from looking around at what we and others we know experience in our lives and asking a question about how it works. I feel so excited about working toward a future where I get to do more research that will contribute to our understanding of human behavior and experiences, allowing us to design policies, create treatments, and help change societal norms and culture that will help people live their lives to the fullest extent.

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2021 Posters on the Hill Participants in Psychology

Congratulations to our CUR Psychology students who participated in CUR's Posters on the Hill session on April 28, 2021!

What Is Posters on the Hill?
CUR hosts the annual Posters on the Hill event to highlight the work of undergraduate researchers from around the country to Members of Congress, congressional staffers, federal government officials, academics, and others, demonstrating the value of federal investment in undergraduate research. Posters on the Hill is a critical element in CUR's advocacy efforts. It is more important than ever that the voice of undergraduate researchers and their mentors are heard on Capitol Hill. The event is highly selective. This year, several hundred applications from 42 states and the District of Columbia were received. From this large pool of applicants, a national panel of experts in their fields selected just 60 student presenters to participate in this prestigious event.

Empathy Building: Assessing the Effectiveness of a Virtual Reality Intervention to Improve Community-Police Relationships
Kathryn Gustafson, Marquette University
Mentors: Amelia Zurcher, Nakia Gordon

Racial disparities in policing have created a culture of mistrust between police officers and communities of color. This mistrust has worsened in recent years as tensions between community and police continue to rise. This study sought to employ virtual reality (VR) technology as a tool to improve intergroup relations between police officers and their communities. The VR tool was designed to encourage perspective-taking, the active consideration of others' mental states and subjective experiences, which has been shown to elicit empathy, decrease implicit biases, and improve relationships among intergroup members. Two techniques were used to induce perspective-taking—viewing the scenario from two different vantage points and presenting counterstereotypical information. To that end, participants (58 police officers, PO; 42 community members, CM) watched a 360-degree live action scenario that depicted a police-community member interaction in which all main characters were Black. After hearing counterstereotypical information from the community member, both PO and CM showed increased empathy for that character; however, empathy for the police officer was not affected by perspective-taking. Both groups also showed a reduction in implicit racial bias for white faces after experiencing the VR tool. Finally, empathy for the community member predicted desire to engage in peace circles and crisis intervention training in PO. These data suggest that empathy for an out-group member can be generated through an intimate understanding of that person's background. Further, empathy may generalize to the entire out-group as evidenced by PO reduced implicit bias and desire to engage with the community.

Go to Full Profile

Status-Dependent Differences in the Acute Stress-Induced Neuroinflammation and Degeneration in the Hamster vmPFC
Roland Mason Rodriguez, University of Tennessee at Knoxville,
Mentor: Matthew Cooper

Ninety percent of humans experience traumatic stress; however, only 10 percent develop psychopathologies like PTSD. Social status influences stress reactivity such that social dominance can promote stress resilience, representing an environmental factor that buffers individuals from maladaptive stress responses. Consequences of chronic stress include neuroinflammation, which is associated with neuronal degeneration and oxidative stress. We used a Syrian Hamster social defeat model to investigate status-dependent differences in susceptibility and resiliency to stress. We hypothesized that neuroinflammation mediates susceptibility in status-dependent pairs such that dominants show an increased protective neuroinflammatory response compared to subordinates. We paired hamsters for daily social encounters to allow formation of a social hierarchy. After dominance relationships were established, the animals were socially defeated. Next, the animals were tested for stress-related behavior using CD testing and SIT. Brains were then collected and analyzed for markers of neuro-inflammation and -degeneration in the vmPFC. We found dominants were more resistant to stress-induced changes in neuroinflammation compared to subordinates but still showed increased markers of tissue degeneration similar to subordinates. We also found that, while acute defeat stress decreased synaptic density in the vmPFC, there were no status-dependent changes in synaptophysin. After CD testing, we found there was a significant increase in submissive-like behavior among subordinates in comparison to dominants that suggests the neuroinflammatory markers correspond to the alteration in social avoidance behavior; however, the results from SIT were inconclusive. Altogether, this study provides a neurobiological basis for the development of novel pharmacological interventions

used to treat traumatic stress exposure.

Go to Full Profile

COVID-19 Impacts Undergraduates' Mental Health: Students Returning Home across State Lines Lose Access to Mental Health-Care
Janice Snow, Utah State University
Mentors: Crissa Levin, Jennifer Grewe, Alexa Sand

In the spring 2020 semester, colleges and universities throughout the nation made sudden, unpreceded shifts to online instruction due to SARS-CoV-2. With the shutdown of campuses, students moved back home with some living out of state from their institution. Additional stressors during the pandemic included health concerns for self and family members, child-care responsibilities increasing for individuals with families, financial instability, and finding accommodations for persons with disabilities. We conducted a national survey of undergraduate students during the end of the spring 2020 semester. Students nationally (n = 197) were asked about mental health and academic outcomes between early and late spring semester. Higher depression, anxiety, and academic distress scores predicted decreased grades during the spring semester. Undergraduate mental health prior to the pandemic was already at crisis levels with 42 percent of college students reporting feeling so depressed it was difficult to function and 63 percent reporting overwhelming anxiety (Duffy et al. 2019). Current licensing and policy regulations prevent most counselors from providing counseling to out-of-state students even when providing counseling online. Traditional schools still charge all students a fee for these counseling services through their tuition fees whether they can legally access them or not. This provides a lens into a broken system that will continue long after the COVID-19 pandemic has ended. Many college students live out of state, and therapists need to have the ability to work with these students in order to ease the mental health crisis among college students.

Go to Full Profile

Honorable Mention:
Rumination as a Mediator of Sleep Quality in Older African American Adults Experiencing Discrimination
Edwin Florencio Jurado, University of Detroit Mercy
Mentor: Samuele Zilioli

Racial inequalities in health among African Americans represent a public health concern. A prominent explanation for the relationship between race and health is the role of discrimination. Discrimination has been conceptualized as a social stressor, with studies establishing the negative impact of maladaptive coping strategies on sleep quality. Rumination involves perseverative thoughts about negative events, which can re-illicit emotional distress experienced during the event. The sample was drawn from the Health among Older Adults Living in Detroit (HOLD) study, which identifies psychosocial predictors of health over a seven-day period. In this study, socioeconomic status (SES) was operationalized as annual income measured in a survey. Sleep was measured by the Pittsburgh Sleep Quality Index (PSQI). Discrimination was measured by the Everyday Discrimination Scale. Daily diaries were used to assess rumination. Results indicated that SES accounted for 9.7 percent of variance in sleep among older African American adults ($F (1, 121) = 12.994$, $b = -0.07$, $SE = 0.019$, $p < 0.000$). After establishing a relationship between SES and sleep quality, rumination was analyzed as a mediator between SES discrimination, racial discrimination, and sleep. Rumination significantly mediated the association between SES discrimination and sleep ($b = 0.299$, $SE = 0.174$, 95 percent CI [0.015, 0.688]) and racial discrimination and sleep ($b = 0.098$, $SE = 0.056$, 95 percent CI [0.004, 0.220]). African Americans who reported lower income also reported worse sleep quality. Additionally, results suggest that among older African American adults, greater rumination indirectly linked those who experienced greater discrimination to worse quality of sleep.

Upcoming Book on Undergraduate Research with Distant Students

A forthcoming book is a collaboration of Jennifer Coleman, a CUR Psychology Councilor, with Nancy Hensel and Bill Campbell, former CUR executive officer and president, respectively. Their edited text, *Undergraduate Research in Online, Virtual, and Hybrid Courses: Proactive Practices for Distant Students* (pending title), is a timely collection of chapters about how to realize UR with remote students across the curriculum.

With and without the forces of a pandemic, there has been a steady increase in online offerings and an even stronger demand for flexible offerings from students. Perhaps more than any other group, CUR members also realize the power of undergraduate research and the quality and credibility it could lend to online learning experiences. The COVID-19 pandemic forced some to adopt approaches that they might not have otherwise tried. While many people are planning a "return to campus," Coleman hopes we might realize the social justice, diversity, and inclusion benefits of continuing to offer undergraduate research to remote students.

This book should be of interest to all members of CUR, not just those in psychology. Contributing authors to this volume offer insights in how to effectively engage online students in research in history, social and behavioral sciences, education, geology, engineering, theater, education, and more. Topics such as virtual conferences and effective communication are addressed in focused chapters and as threads throughout chapters.

Whether you teach online and virtually or might incorporate elements of these modalities to enhance your in-person research programs moving forward, this book contains valuable tips. A release date is forthcoming.

Check out our Psychology Division Page on CUR's Website

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