

Psychology Division 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)

Greetings from the Chair



Greetings CUR Psychology members! I hope you have had productive years conducting research with your students.

In our spring newsletter, we present synopses of research projects by our four student research/travel awardees from this year; in the fall watch for our callout for applications for next year's student awards. We also have a link to this year's Mid-Career Mentor Award presentation, an award that the division gives out every other year. We have a teaching tip and a profile of one of our division members.

Please let me know if there is an activity that you would like the division to engage in (guntherk@wabash.edu). And let us know if you have teaching/research tips that you would like us to share in our fall newsletter!

We hope you enjoy reading the newsletter and are inspired by what our psychology colleagues are doing.

*Karen L. Gunther
CUR Psychology Division Chair
Professor of Psychology
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Meet the 2023-2024 Student Research/Travel Award Recipients!

The CUR Psychology Division offers a limited number of awards in research (e.g., supplies or expenses) or presentations (e.g., travel, hotel, conference registration) for undergraduate students conducting original psychological research (up to \$400 each). Watch the [CUR Psychology Division website](#) next fall for a call for proposals. Here are this year's winners.

Matthew Bazan, University of Georgia

Mentor: Dr. Michelle VanDellen



1. What was the nature of your project?

My project aimed to uncover the extent to which the behavioral approach system (BAS) predicts a) approach related smoking characteristics, b) motivations to quit, and c) treatment success in dual-smoker couples. Additionally, I explored the role of a partner's BAS scores in determining individual and couple treatment outcomes.

2. What was the most challenging thing about the work you did?

The easiest part of my project was definitely running correlation and simple/multiple regression analyses with our dual smoker couple sample to compare to previous literature on individual smokers. However, learning the code and data cleaning necessary for actor-partner interdependence model analysis was probably the trickiest part of my project. Without a firm grasp of the modeling, I regularly had to reference the original textbooks on analysis in dyadic systems.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)

I learned how to leverage source code material to implement innovative forms of analysis! I've been delving into textbooks that provide in-depth explanations of code structure and the necessary files required to execute the code. I see this is as crucial in my graduate studies by allowing me to remain flexible to the possible ways of analyzing data.

4. Did you make any discoveries along the way?

In my study, we found that synchronous total behavioral approach system scores across partners were associated with higher success rates among the target smoker (member of the couple who reached out to us) in our financial incentive treatments. This underscores previous literature that highlights disparities in motivations to quit and quit rates between partners as factors that contribute to challenges in replicating individual couple smoking treatments within dual couple smoker systems.

5. How has the project helped you in your career goals?

This project was instrumental in developing my maturity as a scientist by providing me with the opportunity to independently conduct a research project. From conceptualizing the project idea to delivering the oral presentation, the experience compelled me to ensure thorough research at every stage. This invaluable experience during my undergraduate studies will strengthen my confidence in undertaking personal projects throughout my graduate education at Dartmouth College.

6. What was the most meaningful part of your research experience?

The most significant aspect of this research journey was creating and delivering an oral presentation entirely developed by myself for the first time. It marked a pivotal milestone. Reflecting on past projects, I recalled the extensive support and revisions provided by PI's, peers, and friends during development. However, completing this project instilled in me a profound sense of confidence that I could independently develop and deliver material to a standard that I was proud of. For that, I am immensely thankful to the Council on Undergraduate Research for their support in empowering both me and my scientific endeavors.



1. What was the nature of your project?

In my research project *Exploring a Digital Audience's Influence on Performance, Rating of Perceived Exertion, and Social Physique Anxiety during a Bench Press Test*, we investigated the impact that a digital audience would have on these performance-based variables in physically active males and females. The presence of a physical audience can influence exercise performance, rating of perceived exertion (RPE), and social physique anxiety (SPA). Previous research has shown high SPA can contribute to exercise avoidance behaviors, which can result in negative outcomes for physical and mental health. The expansion of social media usage now provides exercisers with an opportunity to interact with a digital audience. Previous studies have primarily focused on the impact of a physically present audience on exercise performance, RPE, or SPA, with little to no attention given to the influence of a digital audience (i.e., social media). With this void in available research, my team and I investigated if a digital audience had an influence on exercise as a result of these variables being impacted. Physically active males and females ($n = 26$; male = 15, female = 11) underwent a repeated measures design with two conditions, recorded and non-recorded (via camera to give the effect of a digital audience). Both conditions took place 48 hours apart to account for fatigue in performance. Participants completed the YMCA bench press test, the Borg RPE Scale, and the SPA 9-Item Scale in both conditions; with the only difference being the use of the camera to record their performance. In the recorded condition, we deceived participants by telling them their bench press performance was being recorded and the recording would be posted to the department's social media accounts (as an example). Upon completion of both visits, participants were done with their participation in the research study; they were then debriefed on the true purpose of the project.

2. What was the most challenging thing about the work you did?

The easiest component of my research project was data collection. In the preliminary portion of my research project, I became very accustomed to the data collection process along with the instrumentation that was used during the various appointments. By working with the instrumentation throughout my courses in Texas A&M University, Kingsville, transferring the acquired knowledge to my own work was of little to no concern. By becoming extremely familiar with the methodologies before any data was collected, it made the entire data collection process easy and smooth to perform. I was able to make the most of my time with my research participants as a result.

The hardest component of my research project was getting the literature review together. Whenever doing something new for the first time, especially in academics and research, it can be difficult in knowing where to begin. With this being my first research project, I was not 100% sure on where to start. I understood the requirements in formulating a literature review, but starting and knowing how to put all the pieces together gave me the most trouble. With the help of my research mentor, Dr. Amber Shipherd, I was able to gain the necessary instruction and expertise on how to use past literature to my advantage. Understanding how to appropriately read and analyze available research allowed me to realize what exactly I was looking for in order to formulate and respond to my research question.

3. What kinds of things did you learn? (about your topic, about scholarship, or about yourself)

Time management, along with productive communication were lessons that were learned in my research project. Being a full time college student, educational peer mentor, strength and conditioning intern, lead Kinesiology tutor, along with being an undergraduate student researcher gave a whole new meaning to time management. I have not been one to struggle with time management in higher education, but participating in research challenged my time management skills beyond their limits. Through

repetition in my day to day actions as a college student, choosing to tackle on a research project while having a busy schedule strengthened my time management exponentially. Productive communication, specifically with professors and faculty, is a key component in being productive between you and your research team. While I understood that my professors were there to assist me, I also realized that their time was to be respected. Understanding how to be a better steward of their time and presence was a huge learning moment for myself to use in current and future research endeavors.

4. Did you make any discoveries along the way?

In our paired samples *t*-tests, we conducted to assess for differences in total repetitions, RPE, and SPA between conditions. No significant differences were found in total repetitions or in RPE between the conditions, which contrasts with previous research that found improved performance and RPE when a physical audience was present compared to no audience. However, a significant effect was found ($t(25) = 2.27, p = .016, d = .45$) between conditions on SPA. Participants reported higher SPA in the recorded condition when compared to the non-recorded condition. Available research has found performance and RPE differences only when participants could see the physical audience present (Sheridan et al., 2017), suggesting that a digital audience may not impact performance or RPE because participants cannot see the digital audience. Given research has found ethnic differences in strength performance, it is also possible that the results of the present study were impacted by the large number of study participants identifying as Hispanic ($f = 18; 69.20\%$ of the sample). Findings from our study suggest that a digital audience during a bench press test may not influence performance or RPE but may increase SPA in physically active young adults. Exercisers may need to see their audience present for the audience to have an impact on their resistance training performance or RPE.

5. How has the project helped you in your career goals?

Along with strengthening my skills mentioned previously, this project has helped me become a better communicator and instructor by guiding my participants through the exercise procedures. Being an aspiring strength and conditioning coach, knowing how to communicate and instruct athletes will yield in a more efficient and safer coaching environment. With my research project requiring 2 visits per participant, I was able to check in on how each person was feeling from the previous appointment and use that information to bring forth a successful second visit. This research project has given me a platform to practice these skills that will be used in my future career path, alongside strengthening my mentioned skills and giving myself a first-hand look at the entire research process.

6. What was the most meaningful part of your research experience?

The most meaningful part of my research experience was being able to gain at first-hand what it's like to successfully complete a research project. Research is an academic venture that has interested me for as long as I can remember. I was aware of the requirements needed to conduct a research project, but actually doing the work is a whole different animal to tame in itself. Being able to gain this research experience at an undergraduate level will prepare myself academically for any further research endeavors in higher education. In addition, surrounding myself with professionals in exercise science-based research contributed immensely to my learning. Acquiring the help and assistance necessary for success from my professors brought forth both meaningful memories and a learning that will be remembered for years to come.

Carmen Ford, Georgia Southern University

Mentor: Dr. Virginia Wickline



1. *What was the nature of your project?*

My project focused on how syllabi can influence students' perceptions of the course, the instructor, and the document itself. Therefore, we investigated whether the presentation of the syllabus and instructor snapshots, a one-page, graphic-heavy document, would have a positive influence on these three factors and their willingness to take the course.

2. *What was the most challenging thing about the work you did?*

The easiest part of this project was the project was analyzing the data on my parts. The hardest part of this experience was presenting my work at conferences. It was a new experience for me, so it came with a lot of anxiety and fear of failure.

3. *What kinds of things did you learn? (about your topic, about scholarship, or about yourself)*

This research opportunity and conference experience have developed my networking, communication, and presentation skills. This NITOP [National Institute on the Teaching of Psychology] conference gave me the opportunity to talk to professionals in the field that I aspire to go into. While communicating with the instructors at this conference, I got advice about graduate school and teaching methods that will allow me to be a more effective teacher in the future. I have also enhanced my ability to engage in small talk. Lastly, my presentation style has improved drastically. I had only done small-scale presentations before my NITOP experience with my cohort. This was a totally new experience and allowed me to understand things about my research project that I had not considered before.

4. *Did you make any discoveries along the way?*

I discovered throughout these experiences my admiration and appreciation for pedagogical research.

5. *How has the project helped you in your career goals?*

This project has propelled my career goals. My goal before entering my undergraduate degree was to go to graduate school to become a clinical psychologist. As a first-generation student, I was not aware of what this entailed, but I knew where I wanted to be. This experience has allowed me to become better equipped for what graduate school has to offer in terms of the research process.

6. *What was the most meaningful part of your research experience?*

The most meaningful part of this experience was working with my mentor to actualize something that I could be proud of. This process gave me so many new experiences and opened so many doors that I would not have been able to reach alone. I would like to thank my mentor, Dr. Virginia Wickline, for guiding me through this research experience and being there to support me.



1. *What was the nature of your project?*

I used a sample of individuals in romantic relationships who answered questions about themselves in a global survey and their daily relationship events in daily diary surveys over the course of six days. Participants provided saliva samples that allowed us to measure the stress hormone, cortisol. I wanted to see if levels of various attachment styles influenced the stress response individuals had on days where they experienced conflict with their relationship partner. Final analyses revealed that individuals with higher levels of disorganized attachment had flatter (less healthy) diurnal cortisol slopes on days of couple conflict than on days without.

2. *What was the most challenging thing about the work you did?*

I found that narrowing down my research focus was challenging, but that coming up with research ideas was wondrous. Additionally, I found networking at the SPSP [Society for Personality and Social Psychology] conference to be a little out of my comfort zone. With that said, talking about my research was much easier than expected—it was as if I was speaking with kindred spirits about something that we both found fascinating.

3. *What kinds of things did you learn? (about your topic, about scholarship, or about yourself)*

I was given the opportunity to learn about how to process the saliva samples with my mentor. I also thoroughly enjoy the hypothesis/research question formulation part of the research process. I also learned the value of the different strengths individuals bring to a research team.

4. *Did you make any discoveries along the way?*

Perhaps it is a small discovery, but I discovered that the attachment security and cortisol literature is less consistent than I expected. In my opinion, this highlights the need for more research in that area. I also have discovered how much of an impact my undergraduate research experience has had on my academic, personal, career development. My mentor created a wonderful opportunity for me. Before I joined the project, they collected data on many different measures that gave me a lot of freedom in hypothesis formation.

5. *How has the project helped you in your career goals?*

This project not only gave me invaluable research experience, but it also gave me the opportunity to practice presenting my work (three times to date), and experience with every part of the research process (except survey creation and study design). We also plan to publish. I have also realized that attachment styles may be an area of interest for me going forward because their impact is so vast in our lives.

6. *What was the most meaningful part of your research experience?*

The opportunity to share my work and passion with people was more than I could have ever imagined. It makes me the first member of my family to do any kind of research, as I am a first generation college student. Through these opportunities, I have realized that a Ph.D. might be within reach for me.

If you ask anyone who knows me, I love to talk about the things I've learned and their possible implications. To know that the research I've been able to do will be shared beyond my social circles is truly mind-blowing and inspiring for me.

Mid-Career Mentoring Award Winner



Our CUR Psychology Division 2024 Mid-Career Mentoring Award Recipient is [Dr. Jennifer Coane](#), Associate Professor of Psychology at Colby College in Maine.

Dr. Coane's Mid-Career Mentoring Award presentation titled, "Mentorship in the Lab, in the Classroom, and Beyond," can be viewed [at this link](#).

Congratulations, Dr. Coane!

Undergraduate Research Mentoring Spotlight



The CUR Psychology Division is pleased to spotlight the undergraduate research mentoring accomplishments of developmental psychologist [Dr. Chrysalis Wright](#), Senior Lecturer in the [Department of Psychology at the University of Central Florida, Orlando](#).

At UCF Orlando, Dr. Wright directs the [Media & Migration \(M&M\) Undergraduate Research lab](#). The M&M lab examines media and technological influences on developmental processes, attitudes, and behavior. Since launching the M&M Lab in 2011, Dr. Wright has mentored nearly 100 undergraduate research students. She and her students have presented 42 research posters at national psychology conventions, and have published 19 peer-reviewed research articles in

such journals as the [Howard Journal of Communications](#), the [Journal of Media Research](#), and the [Journal of Ethnicity in Substance Abuse](#).

In her home department, Dr. Wright is the Honors Undergraduate Theses ([HUT](#)) Liaison. She has chaired 32 HUTs and served as an additional committee member for nine other HUT students.

Dr. Wright's contributions to undergraduate research in psychology extend beyond her home institution. She has been a reviewer for the [APA's Psi Chi Summer Research Grant](#), the [APA's Psi Chi Research Award](#), and the [APS's Undergraduate Student Grant Competition](#). She has twice served as [APA's Division 46 \(Society for Media Psychology & Technology\)](#), and has been a Board Member for the [Communications Coordination Committee for the United Nations](#).

The CUR Psychology Division congratulates and thanks Dr. Wright for upholding CUR's mission to support and promote high-quality mentored undergraduate research!

Teaching Tip: Helping Research Students Develop Factorial Graph Reading Skills

Nestor Matthews, Denison University



By the time we become mentors to our research students, we typically have had years of experience reading about and conducting psychological research with factorial designs. That's the good news. The not-as-good news is that our years of experience can also burden us with the "curse of knowledge". In particular, we might unknowingly yet erroneously assume that our students see the patterns that we (now) so effortlessly see in factorial graphs. This false assumption can create much mischief; and frustration for the mentor ("my student's not seeing the pattern") and the student ("I'm not seeing what my mentor sees").

To address this, the first steps include acknowledging this expert-novice difference in visual cognition and then reframing it as a practice effect. The next steps might entail giving the student self-paced practice with the mental gymnastics required to visually estimate statistical effects, such as significant main effects and interaction effects in simple 2x2 graphs.

To help students cultivate their factorial graph reading skills I've created [this open tutorial website](#) on [Pavlovia](#) - a platform for conducting online psychology experiments. On each trial, the website randomly generates either a 2x2 bar graph or a 2x2 line graph. It also prompts the student to consider one of three randomly selected statistical effects: the main effect of Factor A, the main effect of Factor B, or the AxB interaction. Students can click "Hint 1" and "Hint 2" before classifying the prompted effect as either significant or non-significant. Immediately after each response, students receive accuracy-feedback and a brief rationale explaining the correct answer.

The website is designed to help psychology research students develop the important visual skill of factorial graph reading.