



SUMMER RESEARCH ASSIGNMENTS

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The Clemmer College decided to pilot a financial incentive program for Summer Research Assignments (SRAs) so that recipients could focus on research and scholarly activity rather than teaching this summer. The recipients were chosen through an application process, in which they submitted proposals to the Internal Research Advisory Committee. “Part of the reason we decided to award SRAs was to show how much the Clemmer College values faculty research. Providing researchers with undistracted time to complete a set of observable and measurable objectives that result in a variety of scholarly products is invaluable,” says Dr. Pamela Mims, Associate Dean of Research and Grants. “We hope to continue to provide similar incentives in the future as we hope they have a good return on the investment.”



DR. GARRIS USES THE SRA TO RESEARCH PROBLEM INTERNET USE

Dr. Bill Garris, Assistant Professor in the Department of Counseling and Human Services, is using the SRA stipend to write a National Science Foundation grant to study the effects of internet overuse on children's emotional well-being.

"Many of us have hesitations about the intrusion of smartphones and tablets into our homes, our dinner tables, and other sacred spaces," explains Dr. Garris. "I have experienced a sense of decreased presence as I have attempted to straddle showing up for my life, while keeping tabs on what's happening online. I think this is an aspect to life that most of us now know."

Dr. Garris's research questions are inspired in part by his three daughters, who have grown up as digital natives. "Developmental scientists are known to experiment on their own children, and, if not experiment, at least to be keen observers of their kids," he says. He wants to know how smartphones and tablet technology may be affecting his daughters, and more generally, the well-being of adolescents and emerging adults.

In the past four years, a number of studies have emerged and found a correlation between Internet Addiction or Problem Internet Use and negative emotional concerns, such as social anxiety, depression, anxiety, and general psychological distress. At this point, the relationship appears bi-directional: sometimes Internet addiction

precedes emotional disturbance, while in other studies the Internet emerges as a way a person deals with their pre-existing negative emotions.

Many of the studies are based upon Asian samples, so the goal of his SRA project is to write a National Science Foundation (NSF) grant that will fund a 4-year, cross-lagged, longitudinal study of Internet use in a sample of Southern Appalachian students. Long term, the aim is to have a better understanding of whether Problem Internet Use in early adolescence contributes to negative emotional patterns in later adolescence among youth in the United States.

Ultimately, as time passes and consistent findings emerge, studies about Problem Internet Use, which can speak to causal relationships, may inform policy recommendations issued by professional organizations. Dr. Garris hopes that this study becomes part of a body of research that informs policy statements and nudges parents to be thoughtful and intentional about technology use in the home.

Dr. Garris is thankful for the opportunity for the SRA. "We all have research ideas that we would implement, given time," he explains. "The SRA nudged me to take action on one of those projects." By using the SRA to write a grant, Dr. Garris hopes that the research will not end in August, but snowball into an ongoing research endeavor.

DR. MORAN USES THE SRA FOR SCIENCE LITERACY INTEGRATION



Dr. Renee Moran, assistant professor in the Department of Curriculum and Instruction, is using the SRA to work on several projects related to the integration of science and literacy.

First, she hopes to complete the publication of a book entitled *Science Literacy Integration in Eastern TN and Beyond*. “At first glance the pairing of science literacy seems strange,” says Dr.



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Moran. “Often we think first of science and math as a better fit. However, through this work we have learned that science and literacy are a great compliment to one another and each informs and strengthens the other.”

Another project Dr. Moran is working on this summer is a proposal for a presentation at the International Literacy Association. Dr. Moran will prepare this proposal based on a hands-on, interactive lesson planning strategy designed and

developed through her work with science literacy integration to the International Literacy Association. “If accepted,” hopes Dr. Moran, “the conference proposal will allow me to share with an international audience what I have learned about science literacy.”

In addition to these projects, she also intends to prepare a grant application funded by the Department of Education focusing on science literacy integration and professional development for in-service and pre-service teachers. This application would apply the methodology of single case design, in which she would gather data on daily measurable observable teacher behaviors related to the integration of science literacy and to observe how those behaviors might change after an intervention of professional development.

“I have been fortunate to work with a talented team over the last three years,” says Dr. Moran, referring to Drs. Tai, Keith, and Robertson, “as we have delved into the work of science literacy. Their expertise and the inspiration of the hundreds of local teachers we have worked with have inspired me to delve deeper into this research.

“My hope is that this all of this research will have impacts locally, statewide, and beyond,” concludes Dr. Moran.



DR. BAZYLER USES THE SRA FOR TWO WEIGHTLIFTING STUDIES

Dr. Caleb Bazylar, Assistant Professor in the Department of Sport, Exercise, Recreation, and Kinesiology, is using the SRA to work on two projects related to his previous work with the Olympic Training Site coaches and athletes.

The first project seeks to determine whether changes in weightlifters' training load, biochemical markers, and squat jump performance correlate to changes in SRSS scores following an intensified training program. He hopes this study will provide a valid, cost-effective, and time-efficient tool coaches can use to quickly assess, and monitor the stress and recovery states of their athletes.

The second project, "Preparing for a National Weightlifting Championship: A Case Series," will characterize the physiological and performance changes of two high-level weightlifters preparing for a major national competition.

"Currently, in anaerobic sports such as weightlifting, an optimal training program to peak for competition has not been established and most sport scientists and coaches use a trial and error approach," explains Dr. Bazylar. "It is particularly important for the coach to know when their athletes achieve peak performance relative to the competition. Peaking too early or too late could result in sub-optimal performance on competition day." He hopes this study will

enhance the performance of high-level athletes at important competitions by providing evidence-based feedback from the physiological responses to peaking training programs.

He plans to present the findings from this project at the 2018 National Strength and Conditioning Association conference at the end of July.

Dr. Bazylar plans to submit both manuscripts for peer-review in August before classes start again. "The SRA is an excellent opportunity for new faculty to develop their research agenda," says Dr. Bazylar. "I work with graduate students throughout the summer on various research projects so the extra support from the CCOE is greatly appreciated."



DR. BARTON USES THE SRA TO WORK ON TWO PROJECTS



Dr. Alison Barton, Associate Professor in the Department of Educational Foundations and Special Education, is using the SRA stipend to tackle two projects this summer.

The first is to complete a manuscript on Helicopter Parenting. Her study attempts to create and validate a measure of Helicopter Parenting. This study also seeks to determine whether college students' solicitation of this parenting behavior impacts its frequency. "It does," says Dr. Barton. "Helicopter Parenting increases with solicitation, and students who solicit it seem to have more college adjustment difficulties than non-solicitors."

Dr. Barton's second summer project is to code and analyze raw data from a study she conducted with Co-Principal Investigator Dr. Colin Chesley from the College of Public Health. This study examines the use of guided inquiry in an online setting and compares it to the more standard version of online instruction: a video. Drs. Barton and Chesley are also examining whether mindset plays a role in the effectiveness of the method. Based on preliminary data analyses, Dr. Barton sees an interaction: those with growth mindset scored higher on post-test when in the guided inquiry condition, whereas those with fixed

mindsets scored higher on the post-test in the video condition.

With a few weeks to go till Fall term begins, Dr. Barton has met or nearly met all of the goals she



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set forth to the Summer Research Assignment review committee, and she hopes to be even further along by the end of summer. "I can't tell you what a difference the stipend has made in my ability to make progress on my research projects," says Dr. Barton. "If I were teaching a second class this summer, I know the amount of time I would have left over to work on research would be extremely limited and having one summer to get a leg up has been enormously helpful."



DR. NIVENS USES THE SRA TO BRING CODING INTO CLASSROOMS

Dr. Ryan Nivens, Associate Professor and Undergraduate Coordinator in the Department of Curriculum & Instruction is using the SRA stipend to work on a long term project with Dr. Godbole entitled "Integrating Computing into the Traditional Curriculum in Mathematics."

He and Dr. Godbole have been inspired by the national push for coding literacy, and have focused their research on projects that could bring coding to the Northeast Tennessee mathematics classrooms. One goal of this project is to publicly disseminate curriculum and instructional materials online, free of charge, via the cloud. "We want to make integrated coursework available to all teachers, everywhere," explains Dr. Nivens.

Dr. Nivens will use experiences from past summer workshops to create a series of modules to be implemented in the high school courses. Partner school teachers will take one or two existing graduate courses on Algebra and Statistics that use the computing language "R" to facilitate the creation of integrated high school classes. Dr. Nivens will then compare the integrated mathematics classes with non-integrated classes.

This project will help advance knowledge about the effects of using college-level computing technology in the high school classroom. "We are looking for application-style problems to enhance

computational thinking within the traditional curriculum," explains Dr. Nivens. "This is different than some National Science Foundation (NSF) projects currently running."

This research will impact high school juniors and seniors taking Algebra 2 or Integrated Math 3. It may also increase the number of secondary mathematics education majors graduating from



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ETSU over the next 3-4 years.

"I have been honored to receive support in my research efforts from the CCOE," says Dr. Nivens. "I feel that as a result, my proposal for funding was much stronger and likely to be funded!" He hopes to disseminate project concepts, outcomes, and data at professional conferences such as Mathfest, Joint Math Meetings, Joint Statistics Meetings, AERA and NCTM Research Conference; webpages and social media; and peer-reviewed scientific and education journals.

DR. MILNER EXPLORES TECH-AFFILIATED SEXUAL VIOLENCE



Dr. Rebecca Milner, Assistant Professor in the Department of Counseling and Human Services, is using the SRA to begin researching perceptions of sexual assault in dating apps.

This project seeks to explore how people perceive unsolicited, explicit photographs that people send or receive in dating apps. “If someone was to do this on the street, it would be sexual assault, a criminal offence,” explains Dr. Milner. “But how are people thinking about this in the context of dating apps?”

Dr. Milner will collaborate with Dr. Emily Donald on this project. “We both know people who have been impacted by unsolicited photographs in dating apps, and that got us thinking,” she says of their inspiration for the project. Dr. Milner took the lead on the project this summer by taking their initial question to the literature and looking for the gap in the existing research.

She has found research on this topic in criminology, multidisciplinary journals, and media journals, but this topic is absent from counseling literature. “I want to make a contribution to counseling literature on this subject that’s currently completely missing from it,” she explains. “How is this impacting people? What are key takeaways that counseling needs to be aware of?”

The working title of the project is “Perceptions of Technology Facilitated Sexual Violence via Dating Apps,” but Dr. Milner is willing to follow the study where it leads. Her goal is to get the research project submitted to the IRB by the end of the summer; however, a Master’s student is interested in this topic for a thesis, so Dr. Milner



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is open to changing the timeline in order to work as a mentor to this student. “We could take this topic and flesh out multiple research questions and studies,” she says.

Dr. Milner is appreciative of the SRA opportunity. “I’ve really enjoyed what I’ve gotten to do,” she says. “The SRA is a fantastic program opportunity that has been afforded to us, and I’m grateful for it.”