As part of the 2022 APS Annual Convention in Chicago, researchers had the opportunity to connect with colleagues and present their work to the broader scientific community through poster sessions. For this issue of the Observer, we’ve asked a few students and early-career researchers to discuss their research relating to their contribution to the advancement of psychological science.

**Signal Detection Theory As a Method for Quantifying Hostile Cognitive Biases: A Word Recognition Example**

*Brittanie Carol Moore* and *Caroline Clements (University of North Carolina Wilmington)*
What did the research reveal that you didn’t already know?

A great deal of research indicates that people show significant cognitive biases in how they remember hostile stimuli. Limited research addresses the determinants of those findings. This study revealed a possible explanation for those biases. We found that participants were less able to distinguish familiar and new hostile words and showed a lower threshold for the level of familiarity needed to recognize hostile words than for neutral words. This was fascinating to me, as I am extremely interested in using basic science and quantitative principles to inform more applied research. The scope of this study is fairly narrow, but it demonstrates how signal detection indices may aid in furthering our understanding of hostile cognitive biases. This research suggests that people make specific errors when confronted with hostile stimuli. Greater understanding of such errors would potentially allow us to better predict and treat aggressive behavior.

How might your findings contribute to the advancement of psychological science?

I hope this project demonstrates the benefits of looking across subfields that divide psychological science. Signal detection is most commonly used in cognitive psychology but has potential use in many domains. For example, aggressive behavior is usually treated as a clinical or social psychology issue. However, people’s ability to accurately detect threat signals likely informs the decision to aggress. Violent offenders often show deficits in emotion recognition. Our analysis suggests there could be two reasons for this: 1) They require less evidence to recognize hostile stimuli, and 2) they are less sensitive when distinguishing hostile stimuli. Signal detection could also define and quantify unspecified concepts in social and clinical theories of aggression and other risky behavior.

Finally, I hope our study demonstrates how basic science principles can be applied to important clinical issues. Going forward, I hope to apply signal detection methodology to intimate partner violence perpetration. I am currently developing a program to explore how perpetrators detect and respond to conflict escalation from their partners.

Korean Validation of Border Permeability and Flexibility in the Work/Family Border Theory

Seunghee Lee and Hyung In Park (Sungkyunkwan University)

What did the research reveal that you didn’t already know?

One finding we did not expect was that the permeability of one border could increase rather than decrease satisfaction in the corresponding work/home domain where permeability originated, contrary to its conceptual definition. In addition, although permeability and flexibility characteristics of each work/family border were differentiated in terms of their factor loadings, antecedents, and consequences, they were moderately related to each other, showing a positive correlation. In the end, we found that permeability may not necessarily always function as interruptions, and there is no black-or-white distinction between permeability and flexibility.
How might your findings contribute to the advancement of psychological science?

Regarding our unexpected finding that the permeability of a border could increase satisfaction in the corresponding domain, we applied the transmissions of resources theory and the spillover theory to explain that resources may have also transmitted from one domain to another through permeability. This can contribute to the advancement of the work-family interface research in psychological science in that it may shed light on how the transmission of resources and positive spillovers could occur when elements from one domain permeate the other. However, future research should include a longitudinal study to distinguish the direction of the influences to determine which of the two precedes between permeability and satisfaction.

The balance between work and non-work has become more important in recent years, and the characteristics of work/family borders will help us understand the dynamics of their interface and ultimately enhance the quality of life in general. Based on our results, organizations are recommended to provide systems or interventions that can improve the flexibility of the border around work, as it is associated with increased job satisfaction. There will be many other areas of psychological studies and practical interventions that can enhance our lives regarding the work and non-work interface using these scales.

A Narrative Examination of the Mental Health Help-Seeking Processes of Black Womxn to Inform Outreach Programs

Sylvia (Chika) Ofodu (Palo Alto University)

What did the research reveal that you didn’t already know?

This is a proposed study, and I look forward to seeing the impact the implications and results may have for outreach programs. Until then, I’ll say that I wasn’t aware of how little work has been done on outreach for Black womxn. I got more and more interested in focusing on outreach because I saw in countless articles that Black womxn are in need of culturally tailored service delivery and outreach work. There is a lot of empirical and theoretical work on how to culturally tailor service delivery, but there is not much on outreach and what that could practically look like. Although culture is so deeply embedded into mental health care, I’m afraid that this point is not emphasized enough.

How might your findings contribute to the advancement of psychological science?

This study contributes to a much wider effort necessary for eliminating health disparities, disrupting intersectional oppression, and addressing social determinants of health. The essence of outreach is to “meet people where they are at” and prioritize the needs of clients and communities in order for them to overcome the barriers associated with seeking out traditional clinic-based health services. Based on the study’s findings, in which I will explore Black womxn’s needs and preferences around seeking mental health treatment, I hope that providers and agencies will have insight into where mental health promotion and education should most occur, as well as how to best empower Black womxn to engage in
treatment. Additionally, considering that I’m operating from the intersectionality of Black feminism, social constructivism, and narrative theory, this proposed study will aim to demonstrate how theory informs practice. Approaching research this way models how fellow psychologists can be inquisitive about what is happening to socially impacted communities and why things are happening in this manner. Having this understanding gives a basis for making decisions and finding solutions that will ignite healing and meaningful work for these marginalized communities.

See previous Up-and-Coming Voices columns

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