Chen, X., Sacré, M., Lenzini, G., Greiff, S., Distler, V., & Sergeeva, A. (2024, May). The Effects of Group Discussion and Role-playing Training on Self-efficacy, Support-seeking, and Reporting Phishing Emails: Evidence from a Mixed-design Experiment. In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1-21).

Abstract:

Organizations rely on phishing interventions to enhance employees' vigilance and safe responses to phishing emails that bypass technical solutions. While various resources are available to counteract phishing, studies emphasize the need for interactive and practical training approaches. To investigate the effectiveness of such an approach, we developed and delivered two anti-phishing trainings, group discussion and role-playing, at a European university. We conducted a pre-registered experiment (N = 105), incorporating repeated measures at three time points, a control group, and three in-situ phishing tests. Both trainings enhanced employees' anti-phishing self-efficacy and support-seeking intention in within-group analyses. Only the role-playing training significantly improved support-seeking intention when compared to the control group. Participants in both trainings reported more phishing tests and demonstrated heightened vigilance to phishing attacks compared to the control group. We discuss practical implications for evaluating and improving phishing interventions and promoting safe responses to phishing threats within organizations.