

Rethinking Security Behavior Through Diversity and Inclusion

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Human-centered security research has explored security behaviors in depth — whether creating strong passwords, adopting two-factor authentication, or using virtual private networks. However, the adoption of these practices varies widely across individuals and communities. Why do these differences occur, and how can we address them when designing cybersecurity interventions and education? In this talk, I will share my group’s research on diversity in security behavior from three perspectives. First, diversity in ability: drawing on a year-long engagement with Deaf communities in Germany, we examined their unique security needs and co-designed educational materials with them in German Sign Language. Second, diversity across countries: by systematically comparing security behaviors between populations in the West and the Majority World, we uncovered significant differences in their risk perceptions and practices. Third, diversity in culture—which is often a deeper factor underlying cross-country differences—as we investigated how cultural and social norms shape perceptions of targeted advertising in South Asia, intergenerational discussions about online scams in China, and shared access to critical infrastructure in rural Ghana. I will conclude the talk by highlighting frameworks for conceptualizing diversity in security research, along with methodologies that enable responsible data collection from diverse populations.