Born to Be Wired: Age-related Differences in Cybersecurity Awareness Information Preferences

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Abstract. Age is an important factor in cybersecurity awareness (CSA), yet its specific role in shaping preferences for how people want CSA information to be designed, delivered, and received remains underexplored. This study investigates age as a predictor of CSA preferences among a sample of 2049 Swedish adults, spanning multiple age groups and genders. Data were collected via a survey and analyzed using hypothesis testing, with effect size computations applied to significant results to estimate the magnitude of group differences. Statistically significant differences were found between age groups for all variables examined; however, the effect sizes were predominantly low to moderate, highlighting the need for a nuanced interpretation. The most pronounced differences were related to preferred information formats: younger participants showed a much stronger preference for game-based learning, while older participants favored email as a delivery channel. In particular, the 18–24 age group consistently stood out as the least willing to engage with cybersecurity information. These findings suggest that current CSA methods may be insufficient for younger populations and that a one-size-fits-all approach is inadequate. More tailored, audience-specific strategies are needed, and AI-driven personalization offers clear potential to adapt cybersecurity awareness activities to the preferences of different age groups.

Keywords: Cybersecurity · Security training · Age-related differences.