CYSE 201S

Article Review #1: Estonia's Cyber-woes

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INTRODUCTION

Despite Estonia being recognized as one of the most digital societies in the modern age, they have a glaring lack of official support for cybersecurity measures. The main goal of this article was to explore this phenomenon of the juxtaposition of an advanced digital country that even uses internet-based voting, but their apparent lack of official support for cybersecurity problems where they turn to, a term the article authors coin, “Cybersecurity Caregiving”. The article finds that this method of informal cybersecurity support is less an issue to be overcome, and more a communal response to the externalization of cybersecurity - they don’t trust outside cybersecurity and so lean on family and friends, or their own research instead.

Relation/Connection to Social Science Principles

The authors of the article relied primarily on the principles of determinism. There is

a clear indication from their hypotheses and the conclusion of the article that the cybersecurity situation in Estonia is a result of how digital the society has become. The authors remain ethically neutral in the article, do their utmost to remain parsimonious, and objective in their conclusions of the data. The one downfall they may have is that the studies are done as questionnaires, which means empirical data can't be completely guaranteed.

Research Question/Hypothesis/Independent Variable/Dependant Variable

The main research questions that the authors settled on were: "RQ1: In which cybersecurity-related situations Estonian home users would ask for external advice or assistance?", "RQ2: What characterizes the cybersecurity support that Estonian home users seek, and how does it differ from the support they receive from their friends or family?", "RQ3: What problems characterise the informal cybersecurity support that Estonian home users receive?", and finally, "RQ4: How do answers to the preceding questions depend on sociodemographic variables or Internet usage?" There aren't really any independent variables to identify, though many dependent variables such as the age of those surveyed, their vulnerabilities, and what type of

help they want/seek informally for cybersecurity needs.

Types of Research Methods Used

The study utilized a mixed methods approach to data gathering, combining both qualitative and quantitative methods to research the phenomena involved in the study. The data was initially collected through interviews with cybersecurity caregivers to gain insight into the relevant aspects of the Estonian Cybersecurity culture. The results of these interviews were then used to form a broader study with more focused questions.

Types of Data Analysis Used

The primary data analysis format was exploratory in nature- identifying patterns in the responses and results during what the article calls “Phase One” of their research. During phase one, they spoke with members of the Estonian State Information Authority to refine their phase two questions. Phase two relied on a descriptive analysis of the data, laying out the results in an easy to read format.

Connections to other Course Concepts

The study shows the importance of many concepts explored in our course so far such as objectivity, parsimony, and ethical neutrality. It exhibits the importance of psychology to cybersecurity, not just in understanding cyber criminal activity but to better predict behavior from end-users from a psychological standpoint.

Connections to the Concerns or Contributions of Marginalized Groups

find that the study, while not directly involved with any marginalized groups, could have an impact on communities which lack the opportunity for proper cybersecurity support. Access to support services is not always guaranteed, or sometimes it is discouraged socially, and through understanding better why Estonians treat cybersecurity the way they do, the study could lead to new insights into how to aid those marginalized communities as well.

Overall Societal Contributions of the Study/Conclusion

I can't determine the overall contributions, in that can't imagine they are very far-reaching. There is the potential for this type of research to be applied to other

groups throughout the world, such as individuals in remote regions or unfamiliar with technology to benefit from such analyses. Understanding why end-users would rather avoid going to professional help in a cyber security incident may help inform future cybersecurity applications, programs, or businesses.

REFERENCE

Kati Sein, Stefan Sutterlin, Tanel Mallo Journal of Cybersecurity, Volume 12, Issue 1,

2026, tyag006, https://doi.org/10.1093/cybsec/tyag006