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*Article 2 Review*

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The article I have chosen to review is Phishing and Cybercrime Risks in a University Student Community. In this study, researchers sought to test multiples hypotheses such as: susceptibility increases based off tailoring of scam, cyber awareness has a correlation to scam susceptibility, females are more likely to fall victim to phishing scams, IT competences correlates to susceptibility, and feelings of safety led to higher susceptibility. The study was conducted as a quasi-experiment with 144 total participants, composed of 73 men, 70 females, and 1 other. The participant pool was reduced to a final 138, due to differing factors. The study used both pre- and post-experiment surveys and used a mix of random phishing attempts, tailored phishing attempts, and spear-phishing attempts, on 2 separate types of groups: the Hunter and the Passive groups. The Hunters were informed ahead of time to be on the lookout for phishing attempts, while the Passive group was not. The responses the participants made to the phishing attempts were classified one of three ways: no response. received but ignored, or received and responded and were tracked using a duplicated university webpage designed to track the IP address and timestamp of website access of participants and whether students logged into the fake website, as well as an embedded beacon included in the emails themselves. The study was conducted over the course of several months and the results concluded that none of the hypotheses were proven correct in this study.

This article addresses many of the social science principles on multiple occasions. In terms of social science principles, I think the most noticeable of the principles addressed were ethical neutrality, relativism, and determinism. Ethical Neutrality was demonstrated by the researchers following ethical standards of ensuring participants signed consent forms, and that the researchers didn't plant actual malware in their phishing attempts. The research was conducted ethically, and participants were not digitally harmed through actual uses of malware

through researchers phishing attempts. The study also sought to a degree to see if based on gender alone, were females more likely to fall for scams? To me that seems to answer a deterministic question; Are females because they are female always determined to be more susceptible to phishing scams? In relation to relativism, they sought to see the relationship between prior cyber awareness training/knowledge and the assumed less likelihood of falling victim to phishing scams.

Many of the concepts we discussed in class have also been intertwined within the details of this study. Primary of which is the immediate indication in the study that this is a quasi-experiment not a traditional or natural experiment. Additionally, this experiment is primarily an experiment on social engineering by utilizing various forms of phishing attacks (i.e., spear-phishing) as the sole form of cyber-attack. Victim precipitation is also touched on briefly in the study when in the conclusion section, they discussed practice effects. In the experiment when a participant fell victim to the scam, they were brought to a page that essentially told them they fell victim to a scam and gave the cyber security advice. This may have allowed victims to reflect on their mistakes and what led them to their decision to engage with a scam in hopes to not make that mistake again. Different methods of research conducted in this study also relate to topics from this course, such as the use of multi-method research. While the researchers used the phishing attempts, they also used pre and post experiment surveys to combine different data-gathering methods to paint a more complete picture of the participants and the study.

There are a few societal contributions to this study. A statistical conclusion reached in this study being that gender did not make statistical difference in susceptibility reinforces other studies that have conclusions that are similar and reinforces the narrative that all genders are equally as likely to become victims of these scams. In addition to the statistical conclusions,

there are inferences that can be made and understanding to be had from the participant self-reporting in the surveys. The surveys asked questions about the participants competencies in IT and ability to detect scams. This could lead to greater studies and research on the differences in how aware citizens really are about cybercrime issues and concerns vs. how aware they believe themselves to be.

## References

Broadhurst, R., Skinner, K., Sifniotis, N., Matamoros-Macias, B., & Ispen, Y. (2019). *Phishing and Cybercrime Risks in a University Student Community*. Retrieved from <https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1006&context=ijcic>