

Article Review #1: Impact of Cybersecurity and AI's Related Factors on Incident Reporting Suspicious Behaviour and Employees Stress: Moderating Role of Cybersecurity Training

Introduction

This paper will review the studies and findings in the article “Impact of Cybersecurity and AI's Related Factors on Incident Reporting Suspicious Behaviour and Employees Stress: Moderating Role of Cybersecurity Training” (Muthuswamy, 2024). While reviewing the article, the main focus of this paper will be how the reading relates to principles of social sciences and further examination of concepts learned in Cybersecurity and the Social Sciences 200S.

How the topic relates to the principles of the social sciences

After reviewing the seven principles of social sciences, one can find relativism, objectivity and determinism related to the article reading. Relativism, the idea that what is true or right can change depending on the situation or perspective of a person. For example, workplace Stress: What causes stress and how it's managed can be different across industries, regions, or social groups. The stress caused by AI automation in a tech company might differ from the stress experienced by workers in the healthcare sector. Next, objectivity, the research or analysis of a subject without personal feelings or biases being influenced in the findings. We see this apply to the policy and decision making in the workplace. A large section covered the importance of having a cybersecurity policy and how to integrate AI in the workplace. This would ensure everyone has consistent and fairness in the policies, they are not biased and have the best interest of the company and workplace. Furthermore, determinism refers to the idea that human behavior is influenced or shaped by factors beyond individual control, such as biological, cultural, or environmental factors. The stress experienced by employees is because of workload and incident responses they experience. “Singh et al. (2023) conducts a meta-analysis on IS stress, identifying unique stressors for cybersecurity personnel that differ from those experienced by typical IT workers. This highlights the importance of understanding the nuances of stress characteristics and responses, not necessarily pathological, in cybersecurity roles.” (Muthuswamy, 2024). Stress that is experience in cybersecurity is beyond environmental factors.

Study's research questions or hypotheses

The main question being researched in the following article is: "How does incident reporting of suspicious behavior mediate relationships in the realm of cybersecurity and employee stress levels?" (Muthuswamy, 2024). The reading further explores how artificial intelligence (AI) can either improve stress or increase it. The article suggests that "while organizational training enhances stress-coping abilities in various domains, additional strategies are needed to address stress arising from AI implementation" (Muthuswamy, 2024). With the advancements of AI it is unavoidable, organizations should create and organize training to raise awareness to artificial intelligence. Raising awareness about a topic helps individuals gain a deeper understanding, which can ultimately reduce stress levels.

Types of research methods used

The main method of research done for this reading is deductive research. This applies because the study begins with an established framework of cybersecurity, employee stress and artificial intelligence (AI). The author elaborates further about incident reporting, cybersecurity awareness, AI intention, and employee stress, how they are related. Also how cybersecurity training affects these relationships between each other. The research "employed structured questionnaires administered to 229 employees" (Muthuswamy, 2024). The author's specific hypotheses are tested by collecting and analyzing data. This testing is characteristic of deductive research.

How concepts from the PowerPoint presentations relate to the article

A concept from the module four powerpoint presentation is Human Systems Integration (HSI). A portion of this reading talks about how AI can be integrated in cybersecurity, to help decrease stress levels for humans working in this field. What is Human Systems Integration? This is an interdisciplinary field that designs systems and technologies effectively. This encourages a focus on humans when developmenting. This is closely tied to how we can integrate AI to reduce stress levels. Although the unknown and being intimidated by AI can cause more stress, AI can create the bridge between the knowledge gaps one may have with technical and non technical skills (Muthuswamy, 2024).

How the topic relates to the challenges, concerns and contributions of marginalized groups

The main concerns for marginalized groups are access and job displacement. Marginalized groups might have limited access to technology, training and basic understandings of cybersecurity. The limited access means the lack of knowledge on how to handle such situations makes them more vulnerable to stress, caused by cybersecurity threats. Also it is a misconception that AI will make a shift in the job market. People should learn how to work with AI. This affects these communities because they may not know how to adapt or learn new skills.

Overall contributions of the studies to society

The overall contributions of the research are significant to society as it researches and studies cybersecurity, AI, and employee stress to society. Cybersecurity in general has been a growing field. Technology is improving threats and causing more security practices. The advancement of artificial intelligence (AI) can be a reason for this. AI makes repetitive tasks quicker and finds information more efficiently. Whether this is used in a practical way is up to the user. This is why it is important to research and bring awareness to society.

Conclusion

The research highlights the importance of cybersecurity, AI, and their impact on employee stress. As technology continues to grow, the integration of AI has both positive and negative effects, making it essential to understand how it influences security practices and the workplace. By exploring these topics, we have learned that AI can enhance efficiency and also bring new challenges, such as increased stress and potential biases. It's crucial to continue researching to ensure that advancements in technology are used responsibly, reducing stress and promoting a safer environment for all employees.

References

Muthuswamy, V. V. (2024). *Impact of cybersecurity and AI's related factors on incident reporting suspicious behaviour and employees stress: Moderating role of cybersecurity training*. *Cybercrime Journal*. Retrieved from <https://cybercrimejournal.com/menuscript/index.php/cybercrimejournal/article/view/330/99>