Article Review #1: Personalities in a Workplace

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An experiment was conducted to see if the people categorized in one of the big five personality traits affected their cybersecurity behavior. Once the experiment ended it turns out that people within the big five personality groups did in fact have a big influence on their cyber security behavior and compliance attitude.

Relation/Connection to Social Science Principles

The best principles this article relates to would be Determinism, Parsimony, and Empiricism. For Determinism, people will do things because of recent events and. For Parsimony, even though the explanations might not too short, scientists for example can say that the Openness trait could impose risks due to low self control, because of how they are more open to new experiences even if it may heighten the threat of risks. Empiricism relates to the article by doing a real time study relying on what they see happen instead of assuming that a personality trait probably does this action.

Research Question/Hypothesis/Independent Variable/Dependent Variable

- Research Question: Does the role of personality traits had any kind of effect on how people interact with technology?
- 5 Hypotheses: These hypotheses include the influence on cybersecurity behavior,
 compliance attitude, if they intervene between the relationship of the five big
 personalities, perceived as a cybersecurity risk, and if their risk is in relation with their
 behavior traits and compliance attitude.
- Independent Variable: People with one of the five personality traits.

• Dependent Variable: How people interact online and their compliance and attitudes when facing risks. It is depending on what kind of personality a person has and not everyone has the same one, therefore leading to different results.

Types of Research Methods Used

The observation research method was used in this study with the sole purpose of analyzing the test subjects. Workers were considerately put into groups and had them get used to the policies and their work environment. They also used quantitative methods by using a mediator and moderator. The mediator being their cybersecurity behavior, if their personality affected that, and the moderator being how they perceived the cybersecurity risks.

Types of Data Analysis Used

How they analyzed the data was with the Structural Equation Modeling with a STATA software so it can deal with a model like this that has multiple paths for the multiple traits. Then, they used a confirmatory factor analysis to check how well made the model was. Then, the scientists did an evaluation to test how correct their hypotheses were. With this model and steps taken they were able that their hypotheses were correct.

Connections to other Course Concepts

One concept this study reinforces are the "personality theories" and how they contribute to a person's behavior, specifically the five big personality types. While the module five power point presentation talks about what kind of personality traits white, grey, and black hackers have, this study expands our knowledge further on this topic, talking about how these categorized people are put into a working environment. A second concept in the same power point it relates to "behavioral theories" and how the environment may have influences how they react. A third

concept would be "behavior and risk," and the study share that different types of situations can put people at risk of a cybercrime, such as how the Openness trait could want a person to improve security will have the type of behavior to be more explorative which could lead to cyber risks. A fourth concept would be the "psychological consequences," and how people, especially ones with the Neuroticism trait can feel anxious or distress when going up against a risk.

Connections to the Concerns or Contributions of Marginalized Groups

I would say this study has little to no effect on marginalized groups. This would be because this is solely based on a person's personality, and everyone is different even if they are in the same group. However, if there could be a study for at least one group it could be the educational level and how confident they are in a working environment, but still, not everyone with a similar education would act the same, and people on different levels could share the same personality.

Overall societal contributions of the study/Conclusion

In conclusion, this study's societal contribution is that it shows the framework for both psychological and behavioral personalities can affect people's behaviors in not just real life, but the cybersecurity behavior as well. It also gives recommendations on what kind of training these people should be receiving, specifically training that directly counters their personality's flaws. It enhances our understanding of how cybersecurity and the social sciences are intertwined along with beneficial advances in relating the two to better improve people's lives in the workplace and lowering their risks.

Reference

Ghaleb, Mohanad Mohammad Sufyan. "Controlling Cyber Crime through Information Security Compliance Behavior: Role of Cybersecurity Awareness, Organizational Culture and Trust in Management." *International Journal of Cyber Criminology*, vol. 19, no. 1, 2025, https://cybercrimejournal.com/menuscript/index.php/cybercrimejournal/article/view/437/123