

**Article Review #1: Perceived Security Risks and Cybersecurity Compliance Attitude: Role  
of Personality Traits and Cybersecurity Behavior**

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### **Introduction/BLUF**

**BLUF:** Personality traits and perceived security risks strongly influence cybersecurity attitudes, which directly affect how safely people behave online.

The article “Perceived Security Risks and Cybersecurity Compliance Attitude: Role of Personality Traits and Cybersecurity Behavior” explores how individual differences, like personality traits and perceptions of online risks, influence attitudes toward cybersecurity and actual online behavior. It connects psychological theories, especially the Big Five personality traits, to real-world compliance with cybersecurity practices.

### **Relation/Connection to Social Science Principles**

The article applies social science principles by examining how human behavior, personality, and perceptions influence online actions. It highlights that behavior is shaped by individual differences (personality traits), perceptions of risk, and context (online environment and rules). It also demonstrates predictability of behavior, the interaction of psychological and social factors (attitudes mediating traits and behavior), and relies on empirical investigation to test these relationships. In short, it uses social science principles to explain why people do or don't comply with cybersecurity rules.

### **Research Question /Hypothesis/ Independent Variable/Dependent Variable**

- Research Question: Do personality traits and perceived security risks shape people's attitudes toward cybersecurity, and does that translate into safer online behavior?
- Hypothesis: The hypotheses of this article were:

- H1: People who perceive higher security risks will have a more positive attitude toward complying with cybersecurity rules.
- H2: Personality traits (the Big Five) significantly influence cybersecurity compliance attitudes.
- H3: Cybersecurity compliance attitude will positively predict actual cybersecurity behavior.
- H4: Personality traits indirectly affect cybersecurity behavior through compliance attitudes.
  - H5: Personality traits may also have a direct effect on cybersecurity behavior.
- Independent Variable: Perceived Security Risks and Personality Traits (Big Five).
- Dependent Variable: Cybersecurity Compliance Attitude (attitude towards cybersecurity rules and policies) and Cybersecurity Behavior (how one behaves towards cybersecurity process and measures)

### **Types of Research Methods used**

This was a Quantitative study that focused on numbers and statistical analysis rather than interviews or open-ended responses. Data was collected via a survey questionnaire in which respondents answered using Likert scales. The independent and dependent variables were all sections included in the questionnaire (e.g., perceived security risks, “Big Five” personality traits, cybersecurity compliance attitude, and cybersecurity behavior). The participants in the study were employees and students who regularly interact with computers and online systems. The authors of the study ensured the statistical analysis was representative of the target population.

### **Types of Data Analysis used**

The authors used statistical techniques to analyze the data collected from the survey responses. Regression analysis and correlation tests were used to view how the independent variables affected attitudes and behaviors. Also used in the study were reliability analysis to check the consistency and reliability of using Cronbach's alpha, and Mediation analysis to see if cybersecurity compliance attitude mediates the effects of personality traits on behavior.

### **Connections to other Course Concepts**

The study "Perceived Security Risks and Cybersecurity Compliance Attitude: Role of Personality Traits and Cybersecurity Behavior" really connects with what I've learned about personality theories in our course. From my perspective, the Big Five traits, especially Agreeableness and Openness, help explain why people behave differently online. In the article, I noticed that traits like conscientiousness and agreeableness influenced both people's attitudes toward cybersecurity and their actual cybersecurity behavior. This makes sense to me because, just like we learned, personality traits shape behavior in predictable ways.

What stood out to me is that the study also showed personality traits influence behavior both directly and indirectly through attitudes. That really clicked with me because it highlights that traits shape our mindset, which then shapes our actions. For instance, a person's openness might make them curious about new technology, but their attitude toward risk determines whether they use it safely or recklessly.

Overall, this study really reinforces my understanding of personality theories. It shows that traits like conscientiousness, agreeableness, and openness matter in predicting online behavior and

cybersecurity compliance, giving me a practical way to see the theories we learned in class at work in real-world digital settings.

### **Connections to the Concerns or contributions of Marginalized Groups**

I think one important consideration from this study for marginalized groups is that personality traits and perceptions of cybersecurity risks might look different depending on people's access to technology, education, or support. People from marginalized communities might face more online risks or have less training on safe online behavior, which could affect both their attitudes and actual cybersecurity practices. The study doesn't focus specifically on these groups, but it made me think that cybersecurity programs should take different backgrounds into account.

### **Overall societal contributions of the study/Conclusion**

In conclusion, this study shows how personality traits and risk perceptions shape cybersecurity behavior, offering insights for more effective training and policies. It highlights that human factors, not just technology, drive online safety. By linking psychology to real-world behavior, the study advances our understanding of cybersecurity in the social sciences and helps explain why some people follow rules while others take risks.

## Reference

Mohammed Sufyan Ghaleb, M., & Sattarov, A. (2025). Perceived Security Risks and Cybersecurity Compliance Attitude: Role of Personality Traits and Cybersecurity Behavioral. *International Journal of Cyber Criminology*, 19(1), 27–53.  
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