

# “Wait, Do I Know You?”

## A Look at Personality and Preventing One’s Personal Information from being Compromised

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### ABSTRACT

We examine the role personality may play in individuals taking the measures necessary to help keep their personal information from being compromised. This is done by using a previously developed and validated survey instrument and combining it with measures for personality in a large-scale survey to see what, if any, relationships may be found. Extraversion, agreeableness, openness, and conscientiousness were all positively associated with taking measures necessary to help mitigate the loss of one’s personal information. In contrast, individuals considered more neurotic were less likely to engage in such protective behavior.

### Keywords

Personal information; identity theft; social networking; online banking; passwords; trust; protective measures; personal safety; security; privacy; cyber security

### 1. INTRODUCTION & BACKGROUND

Individuals have enjoyed the many benefits the Internet has afforded them. While the benefits are many, so are the risks [1]. Our personality tells a lot about us and may be able to help explain some of this behavior and the protective measures we take. In this study, we discuss how the protective measures necessary to mitigate the threats related to our personal information being compromised may be related to personality.

### 2. METHODS

We recruited participants using Amazon’s Mechanical Turk, which is generally regarded as providing similar or higher quality of other recruitment methods [2]. Approximately 91% (516) of the responses obtained were used in the data analysis portion of this study; participants that failed either quality control question were removed from further analysis.

In order to measure the behaviors necessary to mitigate the threat of one’s personal information being compromised, we chose a previously developed and validated instrument [3]. For the five personality traits, we used The Big Five Inventory [4]–[6].

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### 3. DISCUSSION

Given the exploratory nature of this study, we decided to take a simplistic look at possible relationships. In Table 1 we present the correlations between the protective measures necessary to mitigate one’s personal information from being compromised with the five personality traits.

Table 1: Pearson Correlations with Mitigating Behavior

Personality Types	Level of Mitigation
Extraversion	0.103*
Agreeableness	0.173**
Conscientiousness	0.224**
Neuroticism	-0.147**
Openness	0.142**

\* Significant at the 0.05 level \*\* Significant at the 0.01 level

Those that are more conscientious, extraverted, open, and agreeable are more likely to engage in protective behaviors, while those that are more neurotic are less likely to do so. Neurotic individuals are more likely to have issues with impulse control and becoming upset easily [6]. This research suggests they are particularly vulnerable to having their personal information compromised and reacting to it in a significant way.

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