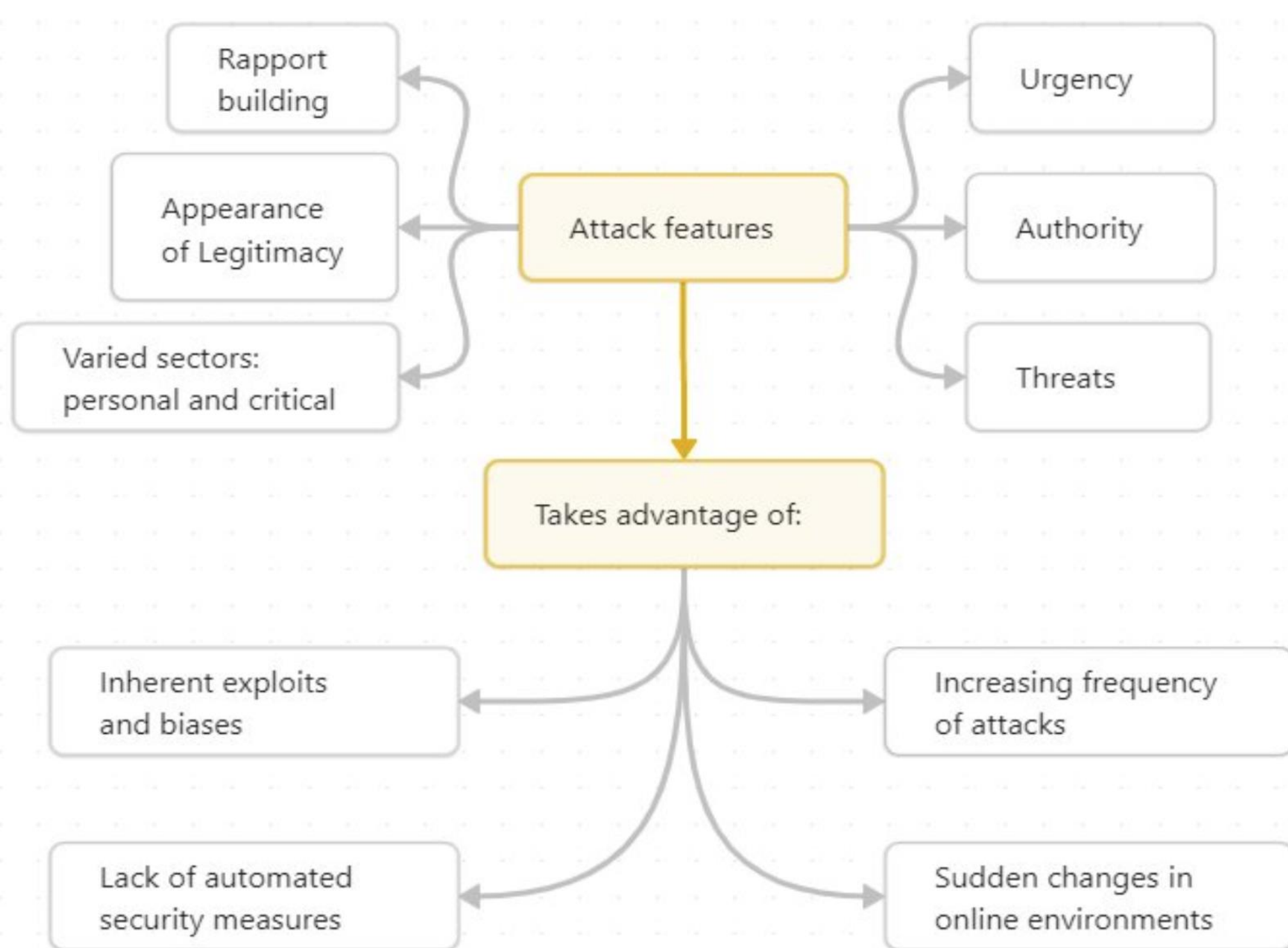


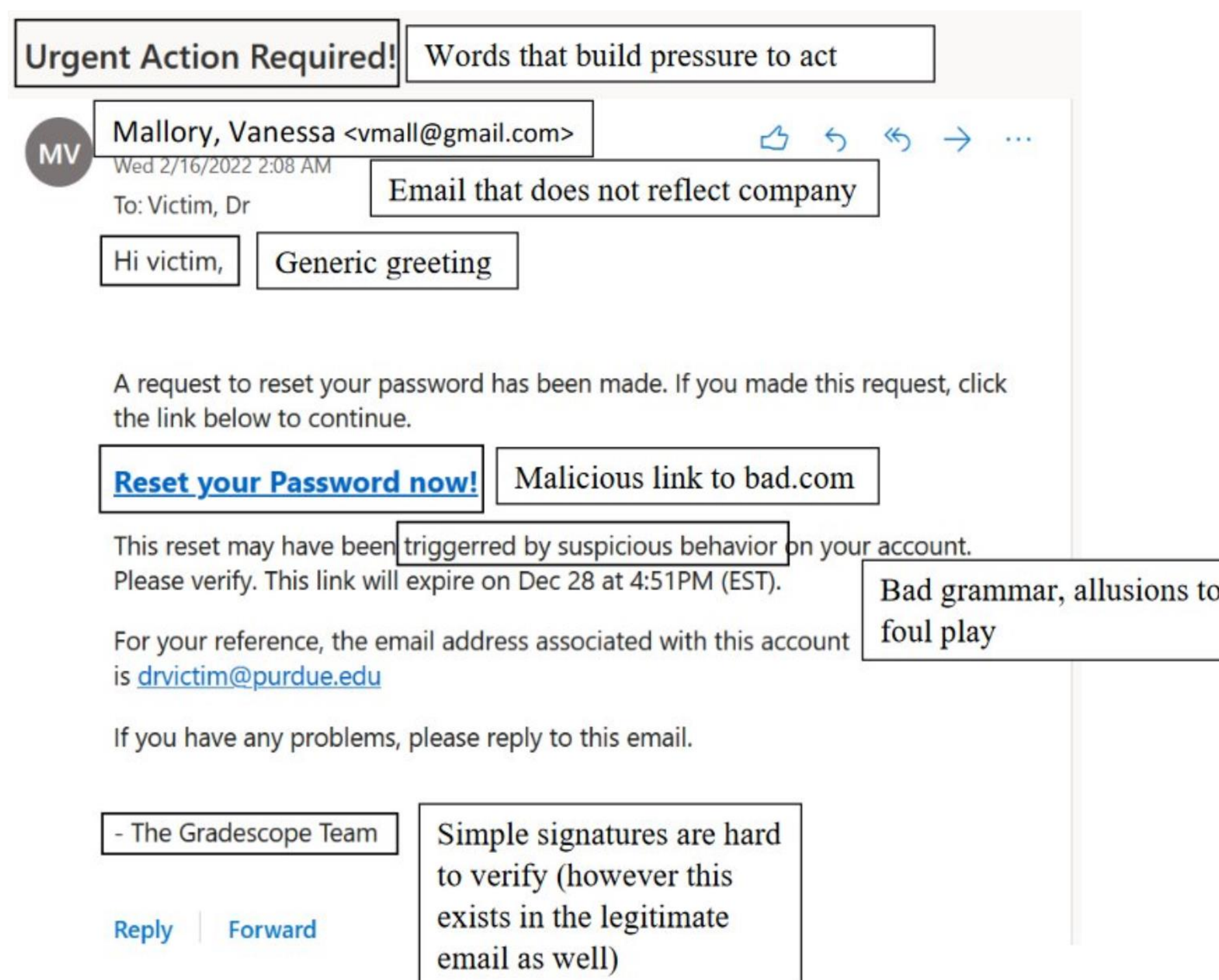
Personality Traits and Resistance to Online Trust Exploitation

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Online Trust Exploitation...



...Like this!

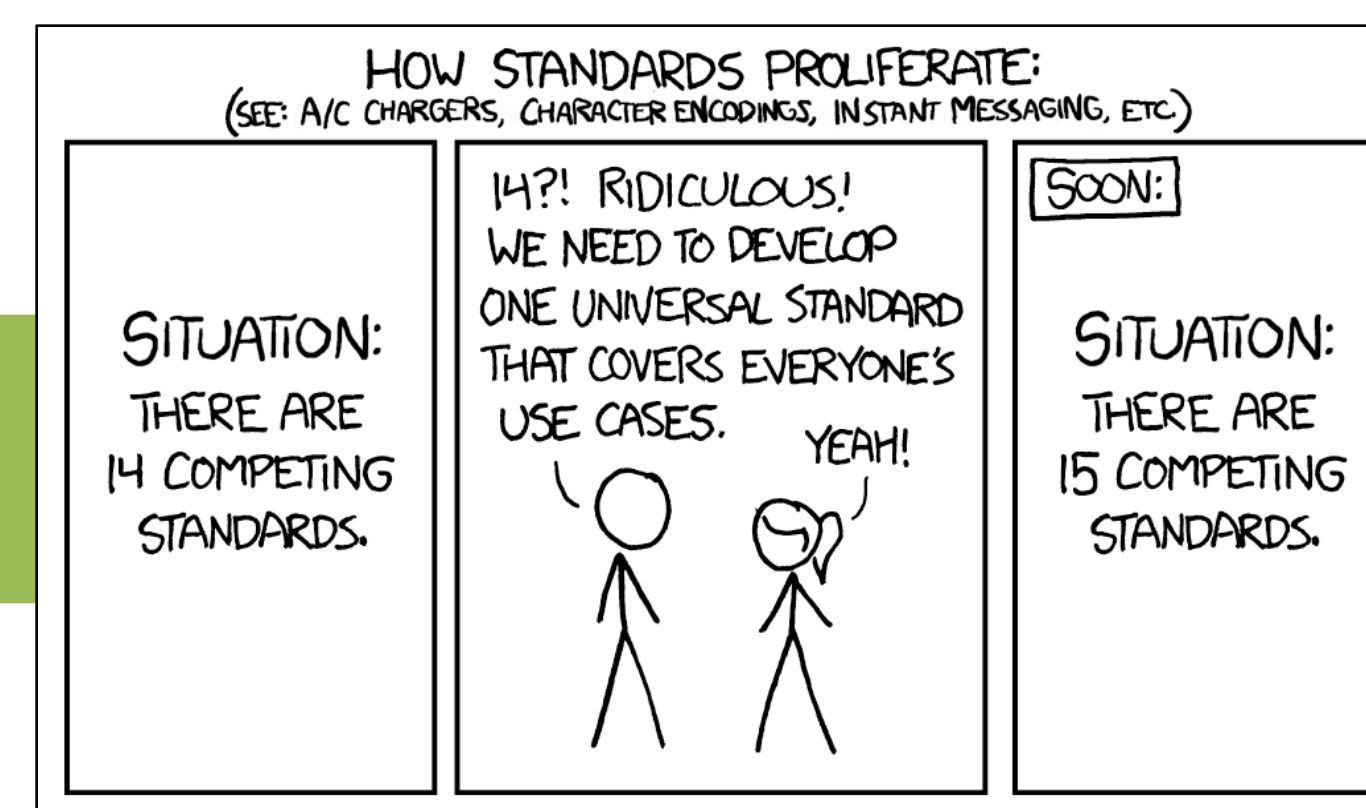
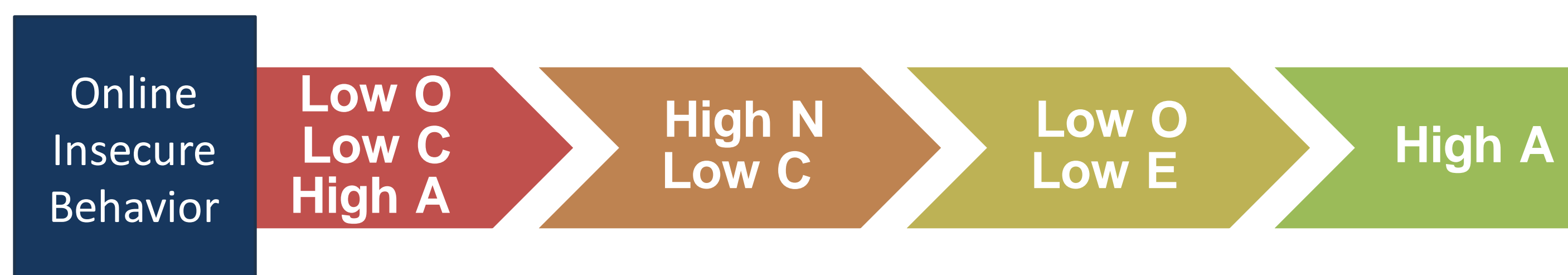


Personality Traits

Five Factor Personality Model

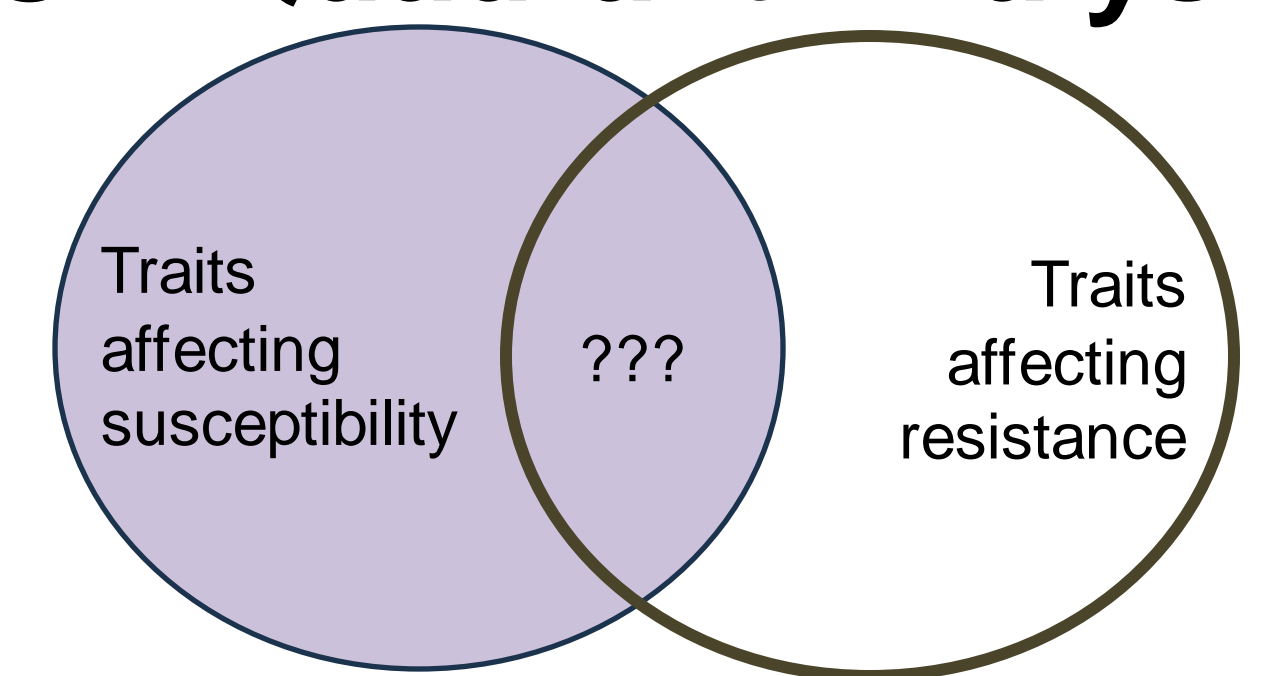
- Openness
- Conscientiousness
- Extroversion
- Agreeableness
- Neuroticism

What we know - Some correlation exists?



<https://xkcd.com/927/>

A Solution: Off-Quadrant Analysis



The Survey

- Demographics
 - N=120 (MTurk)
 - Ages of 18 to 34
 - Located in the United States
 - Experience with computer systems
 - Checked for completeness, automated (bot) responses
- Personality Traits (Mini-IPIP)
- Trust Exploitation Tests
- Security Hygiene
- Paulhus Deception Scale (BIDR-6)

Table 1: Demographics Table

Measure	Item	Count	Percentage
Age	>18 and <25	9	8.91
	>24 and <34	92	91.09
Education	Some high school or less	0	0.0
	High school diploma or GED	5	4.95
	Some college, but no degree	3	2.97
	Associates or technical degree	0	0.0
	Bachelor's degree	80	79.20
	Graduate or professional degree	13	12.87
Frequency of online communication	4+ hours/day	13	12.87
	Everyday	61	60.40
	2-3 times a week	23	22.77
	Once a week	2	1.98
	Less than once a week	2	1.98
Do not use online communication	0	0.0	

Results

Significant traits: **Conscientiousness**

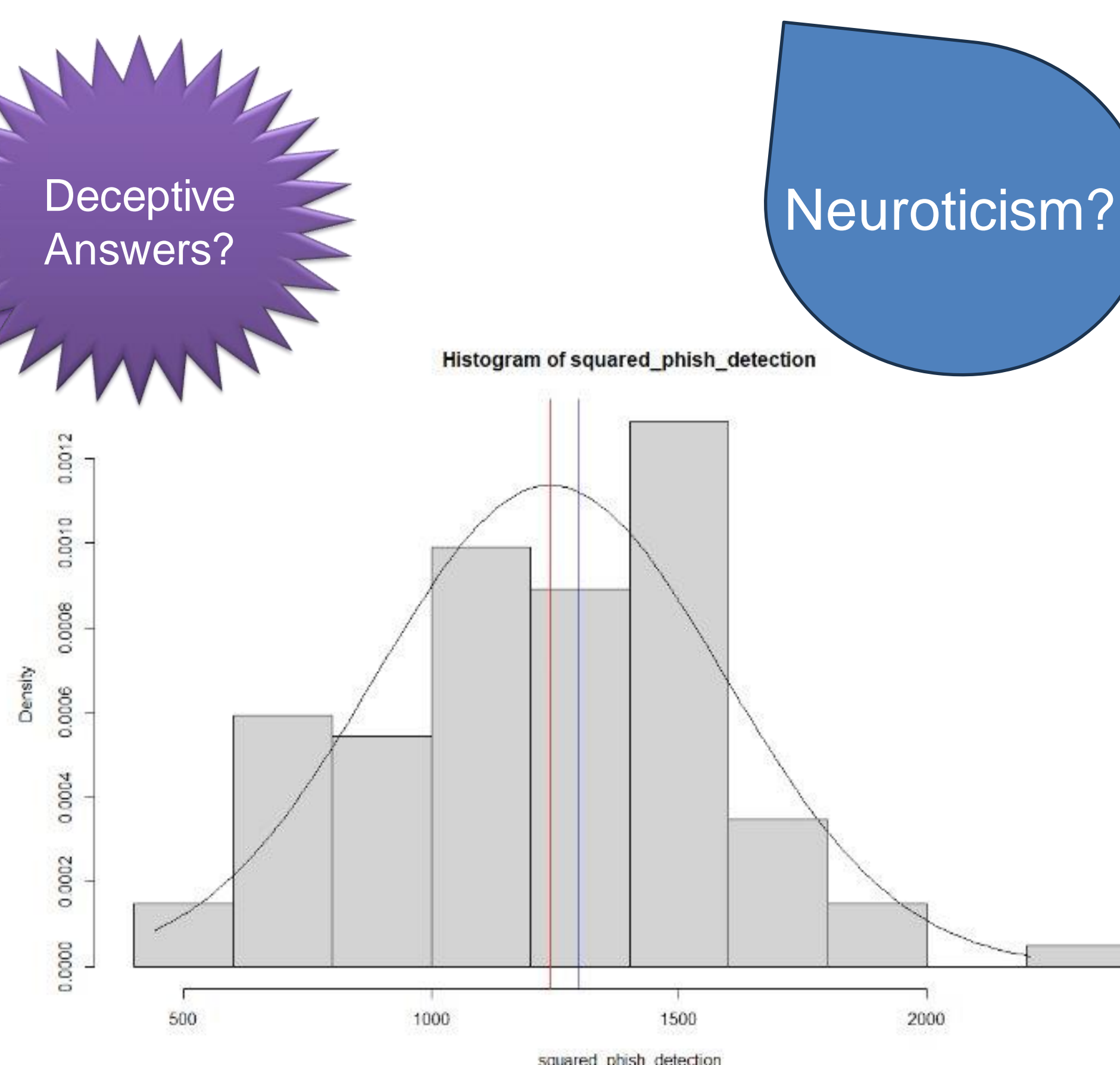


Table 2: Linear Regression Analysis of (Squared) Resistance to Trust Exploitation (**p<0.001)

Test Scores	R ²	F	p	t	SS
-	-	-	-	-	12319976
Conscientiousness	0.2081	26.02	1.63e-06 ***	5.101	2564081
Agreeableness	0.002317	0.2299	0.6327	-0.479	28540
Openness	0.00433	0.4305	0.5133	-0.656	53344
Cyber Hygiene	0.008197	0.8183	0.3679	-0.905	100992

Findings

- Personality traits seem to be better indicators of potential behaviors than intentions from participants
- 15% of the participants measured positively for deceptive or socially desirable responses
- A positive, significant correlation exists between Conscientiousness and resistance (p<0.001)
- No significant correlations with Openness or Agreeableness
- These results specifically support the theory that detail-oriented/careful individuals may correlate with stronger abilities to identify online trust exploitation

Paper

