

# Source Credibility and Cybersecurity Behaviors of Computer Users

*Bracken Sallin, Information Systems, College of Business*

## Introduction

Cybersecurity is a cybernetic process that engages technological capital and human beings. In our internet age, understanding the motivations and behaviors underlying human interactions with the technological capital in this process is formative to protecting governments, businesses, and people from threats. This study examined source credibility's impact on users' attitudes towards Cybersecurity threats.

The question we sought to answer in the context of this was whether or not people evaluated source credibility from online sources differently from other news media.

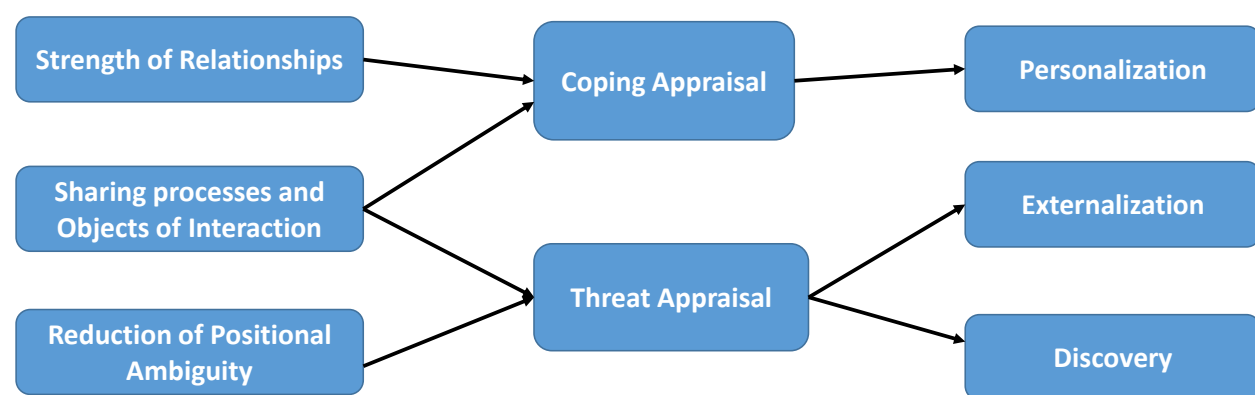


Figure 3: Conceptual Model

## Methodology

A survey instrument was developed from our model using a 7 point Likert scale and a perceived caring construct that would evaluate user's responses to two scenarios regarding cybersecurity information sources.

This survey was disseminated through email inside the College of Business. Of 1223 emails sent, 489 emails were opened. From the opened emails we had 164 respondents. For opened emails, this represented a respectable 34% response rate.

In our survey, we tested each construct against and between each scenario in order to establish relationships, if any, to our model, and the differences between them.

## Acknowledgements

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## Key Findings

Source credibility was not found to have a significant effect on any of our model's constructs, but it is worthwhile noting each scenario tested was treated differently. Further, significant relationships between some constructs were noted.

### Correlation Matrix Of Constructs

	1	2	3	4	5	6	7	8	9	10
1. Source Credibility	1	-0.004	-0.172	-0.027	-0.109	-0.158	0.157	-0.181	-0.206	-0.067
2. Perceived Susceptibility	-0.004	1	0.808	0.384	0.038	-0.284	0.235	-0.013	-0.002	0.196
3. Perceived Threat	-0.172	0.808	1	0.375	0.038	-0.284	0.23	0.118	0.09	0.318
4. Perceived Severity	-0.027	0.384	0.375	1	0.254	-0.083	0.192	0.084	0.109	0.21
5. Safeguard Effectiveness	-0.109	0.069	0.038	0.254	1	0.27	0.05	0.3	0.379	0.066
6. Self Efficacy	-0.158	-0.333	-0.284	-0.083	0.27	1	-0.5	0.526	0.564	0.198
7. Perceived Avoidance Cost	0.157	0.235	0.23	0.192	0.05	-0.5	1	-0.433	-0.408	-0.203
8. Avoidance Motivation	-0.181	-0.013	0.118	0.084	0.3	0.526	-0.433	1	0.77	0.553
9. Avoidance Behavior	-0.206	-0.002	0.09	0.109	0.379	0.564	-0.408	0.77	1	0.459
10. Issue Involvement	-0.067	0.196	0.318	0.21	0.066	0.198	-0.203	0.553	0.459	1

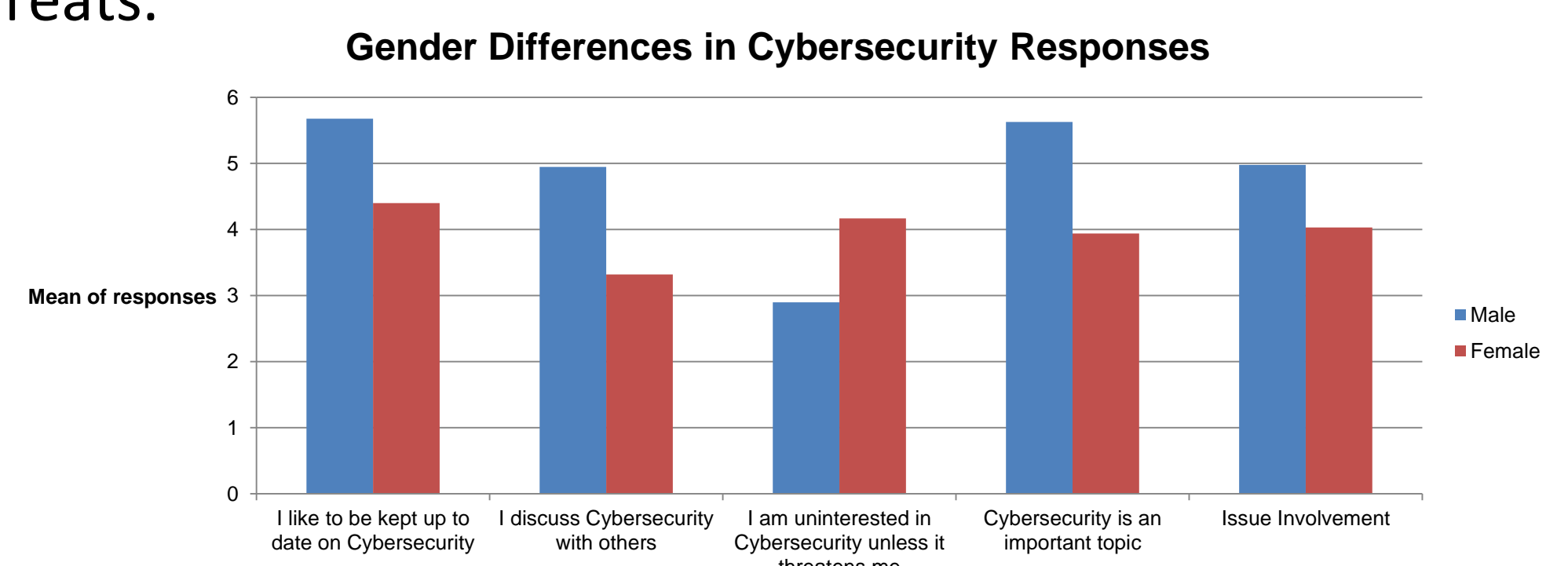
## Conclusions and Potential for Research

While source credibility was found to have a non-significant impact based on our model, other underlying patterns emerge that are worth investigation. A strong relationship was found between user issue involvement and avoidance motivation; avoidance motivation and avoidance behavior; perceived threat and perceived susceptibility.

As our pilot was limited in scope, it is possible that our scenarios could have been better designed, or the study disseminated across different networks to achieve other findings regarding source credibility.

In addition to these the demographic data collected as part of our survey suggests other significant patterns.

In our survey, women and men treated the cybersecurity scenarios differently. For example, though men and women treated threat perception equivalently, women were found to be less involved and less confident in enacting safeguard measures and thus less likely to act on threats.



### References

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- Liang, Huigang, and Yajiong Xue. "Understanding Security Behaviors in Personal Computer Usage: A Threat Avoidance Perspective." *Journal of the Association for Information Systems* 11, no. 7 (2010): 394.