

Accepted Manuscript

Understanding smartphone security behaviors: An extension of the protection motivation theory with anticipated regret

Silas Formunyuy Verkijika

PII: S0167-4048(18)30250-5
DOI: [10.1016/j.cose.2018.03.008](https://doi.org/10.1016/j.cose.2018.03.008)
Reference: COSE 1314



To appear in: *Computers & Security*

Received date: 4 December 2017
Revised date: 14 February 2018
Accepted date: 19 March 2018

Please cite this article as: Silas Formunyuy Verkijika , Understanding smartphone security behaviors: An extension of the protection motivation theory with anticipated regret , *Computers & Security* (2018), doi: [10.1016/j.cose.2018.03.008](https://doi.org/10.1016/j.cose.2018.03.008)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Understanding smartphone security behaviors: An extension of the protection motivation theory with anticipated regret

Silas Formunyuy Verkijika

Department of Computer Science & Informatics, University of the Free State, 205 Nelson Mandela Drive, Bloemfontein, South Africa

Abstract

Many people nowadays perpetually live their lives through their smartphones. This has been made possible by the connectivity capability of smartphones and the numerous smartphone apps that exist for most of what users want to do. As a result, a substantially valuable and sensitive amount of information is being stored and/or processed via smartphones, making them a key target for cybercriminals. However, research on smartphone security behaviors is still very limited when compared with the matured research on organizational security behaviors. In this given, this study proposed a model for understanding smartphone security behaviors based on a modification of the protection motivation theory (PMT) by including the role of anticipated regret as a mediator between the threat dimensions of the PMT and security intentions/behaviors. The results showed that perceived vulnerability and perceived severity had a significant positive influence on anticipated regret. Also, self-efficacy and anticipated regret had significant direct associations with smartphone security intentions, while anticipated regret and smartphone security intentions positively influenced smartphone security behaviors. The study culminates with a discussion of the practical and research implications of these findings.

Keywords: Security behavior; Security intentions; Smartphones; Protection motivation theory; Anticipated regret

1. Introduction

Over the past decades, the world has witnessed an unprecedented increase in the use of smartphones. Wang, Xiang, and Fesenmaier (2014) describe smartphones as internet-enabled devices with intuitive user interfaces and advanced operating systems that provide numerous features for users (e.g. apps for different functions, digital camera, and GPS navigation). Smartphones have become the most convenient method of accessing the internet for many users around the world, especially in developing countries where low-cost smartphone ownership far

Download English Version:

<https://daneshyari.com/en/article/11002570>

Download Persian Version:

<https://daneshyari.com/article/11002570>

[Daneshyari.com](https://daneshyari.com)