

# Female underrepresentation in the cybersecurity workforce – a study on cybersecurity professionals in Sri Lanka

The  
cybersecurity  
workforce

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## Abstract

**Purpose** – This study aims to identify factors impacting female underrepresentation among cybersecurity professionals in Sri Lanka.

**Design/methodology/approach** – The study is based on survey data from 75 female professionals working in the cybersecurity sector of Sri Lanka. Partial least squares structural equation modelling was used to analyse the data.

**Findings** – Results showed that female self-efficacy on their capabilities, family, organisational culture, mentors and role model act as antecedents for women's perceived motivation to select cybersecurity as a career option.

**Originality/value** – The study advances the literature on workforce gaps in the cybersecurity sector and claims that there is no single factor causing significant female underrepresentation in the cybersecurity industry. While clarifying the complexity of such factors, the study presents how such factors can systematise to attract females into the cybersecurity field.

**Keywords** Sri Lanka, PLS-SEM, Cybersecurity, Female representation

**Paper type** Research paper

## 1. Introduction

The enormous developments in information technology partner with potential drawbacks, bringing extensive consequences and threats to people, businesses, and national security (Frost and Sullivan, 2013). When the world is extremely hyper-connected, internet becomes a fundamental and critical need of our socio-economic activities. Sophisticated internet attacks involving artificial intelligence to carry out online frauds, identity theft, extortion and terrorism may lead to mass disruption in societies with long-lasting economic impacts (Houses of Parliament, 2017). Information security, also known as cybersecurity, is a growing market forecasted to be US\$170.4bn by 2022 (Gartner Inc., 2018). The National Cyber Security Centre, UK (2020) defines computer security, cybersecurity and information security as “how individuals and



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