

## RESTRICTED

### ABSTRACT

Future warfare would be fought in cyber space and it is essential to formulate strategies to face the asymmetric enemy. Man behind the machine in cyber security loop is vulnerable and his emotional and other attributes cannot be easily controlled and measured. It is inevitable to derive an indicator to measure personal vulnerability in cyber domain to make strategic decisions in future. Many factors could influence cyber security in an organization. Counterproductive computer use is a concept evolved and mismanaging of incoming mail is a result of it. Response behaviour to an unknown e-mail could influence by several factors. This study was focused on cyber security awareness, negligence, emotional stability and computer literacy. Novel concept of Cyber Security Index (CSI) was introduced to propose better indication on level of cyber security vulnerability of an individual. This paper is developed from a positivist philosophy, treating the use of statistical, experimental and other numerical data, to describe the actions and phenomena observed, and the correlations and interactions between them. It is also uses the deductive approach to test the theory and correlations of variables through a hypothesis. Target population of this study was e-mail users of SLAF mail server and sample was scientifically drawn using proportionate stratified random sampling technique. Tool to measure variables was online questionnaire posted on Google Forms. Internal consistency reliability test was satisfied with fairly high value of Cronbach's Alpha and sample adequacy was strengthen by KMO and Bartlett's Test with higher value of KMO. Cyber security awareness, computer literacy and emotional stability positively correlated with the respond behaviour while the correlation of negligence was not significant. Respond behaviour and CSI negatively correlated significantly. Indirect and direct relationships of independent variables with CSI were significant and thus alternative hypotheses were proven. Overall results strengthen the view of using CSI as a better indicator for the measurement of individual's response behaviour and vulnerability in relation with cyber security.

**Key Words:** Cyber security, Response behaviour, Computer literacy, Negligence, Emotional stability, Cyber security awareness, (Cyber Security Index) CSI