

ABSTRACT

The usage of information and communications technology in education institution resulting in easier access to the stored data in that institution. This could lead into potentially data breach by cyber hackers which have ill intentions. Hence there is need for metrics that is reliable to know which data is important. By using variable from FERPA to create questionnaire which filled by the people that generally understand about ICT, continued by validity analysis. Then the respond is tested by using Cronbach's Alpha, intraclass correlation and test-retest to get the reliability. To help with the test, SmartPLS and IBM SPSS Statistics is used. Based on the result of reliability test, data in personally identifiable variable, can be assumed as the most valuable data. The result of the test is the reliability that is considered as strong or reliable which later can be used for framework creation for risk assessment in education institutions. This is proved by the result of Cronbach's Alpha coefficient reliability score 0,730-0,911 and set 0,7 as lower limit. In intraclass correlation, coefficient score is 0,728-0,91 and the lower limit is 0,7. Test-retest also proved the strong of reliability, with 0,63-0,797 as the score of testing and the lower limit for test-retest is 0,61.

Keywords: information and communications technology, data breach, cyber, metrics, reliability, risk