

# **A Study on Computer Self - Efficacy and Information Security Literacy of Elementary School Children for Elementary School Senior Grade Student in Kaohsiung**

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## **ABSTRACT**

The progress and application of information technology has led to a change of a learning type in education. It is an issue worthy of attention that how primary school students learn safely and efficiently under the environment filled with information technology. The main purpose of this research is to explore the differences between students with different school backgrounds using computer efficiently and information security, and explore the influence of students using computer on information security as well.

The objects of this study are junior and senior grades primary students in Kaohsiung, using questionnaire survey. The contents of the questionnaire included “Information of students’ backgrounds”, “Computer self-efficacy form” and “Information security form”. Retrieved 161 valid questionnaires and the conclusions we drew by means of descriptive statistics and inferential statistical analyzed the information we obtained are as follows:

1. Primary students’ computer self-efficacies are on the mid-high level, they had the best performances on “basic operational capability”, and their senses of information security are high. In addition, they had great performance on “online dating”.
2. Primary students in Kaohsiung who can use computer at home are superior in the category of computer self-efficacy to those who can’t. There’s no significant difference of genders, grades, and how much time students spend on the computer.
3. There is no significant difference of primary students from different backgrounds in the category of information security. However, boys are better than girls on “virus protection”, the sixth grade students are better than the fourth grade students on “internet indulgence”.
4. There is a significant low correlation between the computer self-efficacy and information security and the four levels of "virus protection", "personal protection", "network etiquette" and "network friend".
5. There is a significant prediction that the higher the levels of self-efficacy of the “network application ability” primary students in Kaohsiung are, the better the degree of "information security” they get.

This study is limited by time, manpower, funding and other factors, so it had smaller random samples. It is recommended that the questionnaire population can be extended to different counties and school systems, and the number of student samples may also be considered for larger-scale research. There are other factors that affect the performance evaluation; they are also included in the study, so that the research would be much more complete.

Key words: computer self-efficacy, information security, information moral attitude