CHAPTER V

CONCLUSION AND FUTURE WORKS

5.1 Introduction

Information security concerns everyone; the computing has become a spine, in business as in everyday life, which documented the association of social communication through mobile phones. Often, news is broadcasted about security incidents, such as data leakage, loss of data so more attention should be given to security awareness in smart phone and to spread the awareness among different users. The study focused on students in order to understand the security risks that can cause harm and data lost from their smart phones. In this study, a quantitative methodology was employed to achieve the objectives of the study as the target group aged from 20 to 35 years old, which are pursuing their study in USIM.

5.2 Main finding

There are five important variables measured in this study; security awareness, security knowledge, security training, security attitude and security behavior. The most important variable is security awareness. The variables were measured by using a five-Likert scale from strongly disagree to strongly agree.

The data analyses and results are pertaining to reliability assessment, demographic profile, descriptive analysis, correlations and regression analyses, and hypotheses testing. In the first part of the analysis, the researcher tested reliability analysis to test the reliability of the items in each construct or the validity of the measuring instrument that is used in this study. The result indicated that the questionnaire found to be reliable as alpha is closer to 1. The questionnaire shows a high reliability based on the alpha score (α=0.663 – 0.911). An alpha score above 0.75 is generally indicating a scale of high reliability (Pallant, 2010), while a score of 0.5 and above is considered moderate reliability. To that end, the instrument which is used in this study is reliable and is appropriate to measure the construct.

In addition, correlations test was conducted between the independent and the dependent variables. The findings revealed that all the independent variables were found to be statistically correlated to each other. The correlations between security awareness and all the factors were measured. The Security Awareness was significantly correlated with all the scientific qualification variables ($p < 0.05$). The results of the correlations can be reported as;

Security Awareness and Security Knowledge, $r = .595$, $p < .05$

Security Awareness and Security Training, $r = .995$, $p < .05$

Security Awareness and Security Attitude, $r = .997$, $p < .05$

Security Awareness and Security Behavior, $r = .997$, $p < .05$.

The closer the R values to 1, the stronger the relationship. The correlations found to be ranged from moderate to very strong. There were significant relationships between Security Awareness and Security Knowledge, Security Training, Security Attitude and Security Behavior ($p < .05$).

Multiple regression analysis was conducted in order to provide the researcher with different outcomes in order to answer the study questions and test the research hypotheses postulated. The method provides a relative contribution of the individual variables and presents which of the variables best predict the outcome. For instance, R^2 represents the way a set of variables are best predicting a particular outcome of the security awareness of smart phone functionality among USIM students. The R^2 standard value is 1 which indicates a perfect linear relationship between both sets of variables. In contrast, if the value is equal to 0, it shows no linear relationship between the variables.

The most important variable is the security awareness of smart phone functionality. Age and education level were found to have significant contribution to users' attitude towards security of smart phone functionality, while gender and the type of service or item the users' used were found not significant. Users' behavior toward security of smart phone functionality is not impacted by the used security system and the type of services or items used by the users. On the other hand, security knowledge of smart phone security functionality was impacted by the users' attitude, behavior, training, age, and education level. However, gender shows no significant contribution to the users' security knowledge. The most important tested variable is the users' security awareness

toward smart phone security functionality, all factors contributed significantly to their security awareness except authentication method with no significant influence on the dependent variable. This indicates that with knowledge, attitude, behavior and training, the users who were also students in USIM will obtain better security awareness towards their smart phone security functionality.

The summary results of the objectives of the study:-

Objective 1

I. To identify the current level of awareness security functionality in smart phone security functionality.

The variables were measured by using a five-Liker scale rged from strongly disagree to strongly agree. The results reveal that all the variables at high level; a score of 4 and above is considered high level, less than 4 is moderate and 2.0 and below is low. Thus, the security awareness is at high level. This indicates that the students' awareness level toward smart phone security functionality is high. On the other hand, the factors which may impact the security awareness such as; security training, attitude and behavior are also high while security knowledge is moderate.

Objective II

II -To identify the relationship between the factors that may affect the level of awareness.

The results indicated that there are relationships between the factors that affect the level of awareness.

Objective III

III. To design a model of a smart phone security functionality awareness.

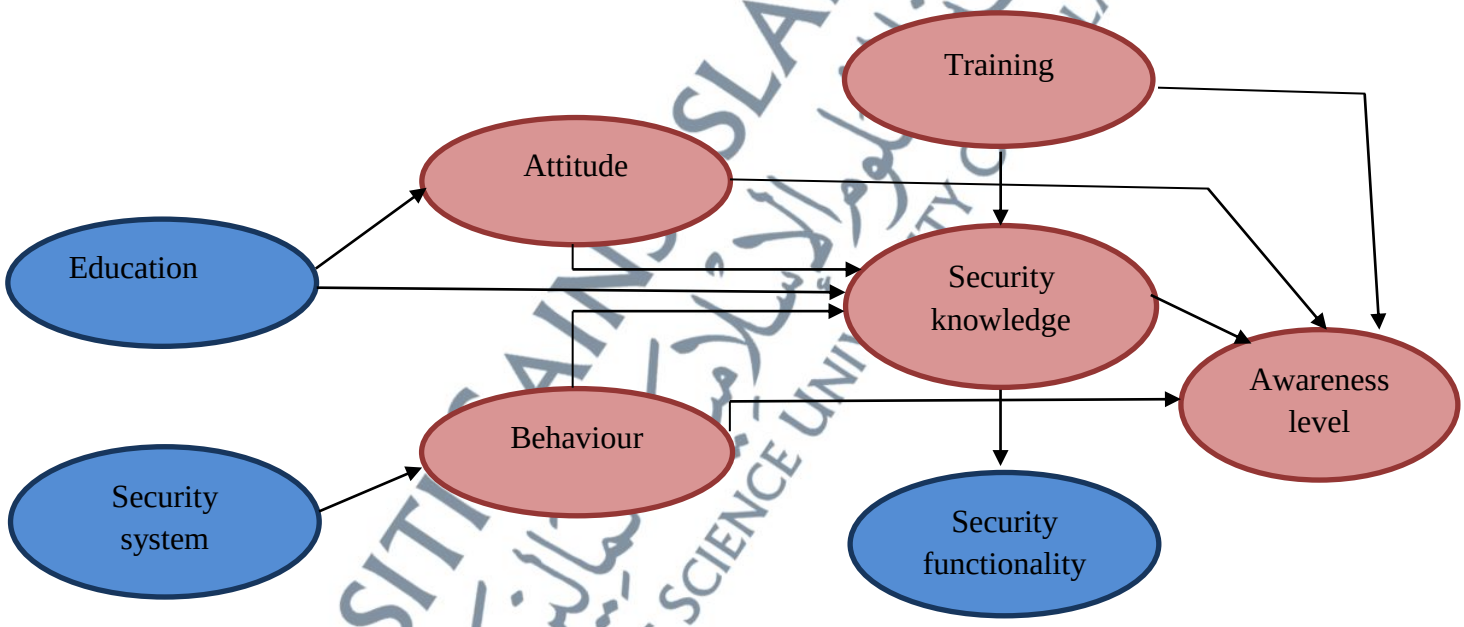

Figure 5.1 Smart phone Security Functionality Awareness Model

Through the study of factors related to this study, found the relationships between the factors and identify independent factors and dependent factors. Can the scheme design (a smart phone security functionality awareness model), so that this diagram shows the impact of each factor on other factors also determine the factors that affect the level of

awareness. The factors have affect on the level of awareness are (attitude, training, behavior and security knowledge) these are dependent factors.

5.3 Research Contribution and Significance

This study proposed a model of smart phone security functionality awareness. This model gives a basic overview of the concept that security awareness is directly affected by the variables. The novelty of this research a contribution to substantive knowledge by identifying the factors of security functionality awareness in smart phones this factors that affect the level of awareness among users.

This knowledge helps different communities such as manufacturers of smart phones, mobile devices and researchers interested in this aspect as well as users' smart phone.

5.4 Study Limitation and Difficulties

1. The first is difficulties in data collection it was conducted during the exam week.
2. The second difficulties is time limitation in conduct the research
3. The last is barrier as the researcher is not very fluent in deal with student because of the language difference.
4. The result this study not in depth and the reflected results are generally in objective 1. Because, the students from faculty are unknown. So the level is high

may be because the majority of students from IT security, if students from other faculty may be was different result.

5.5 Future Works

The study relies on some of the important factors that affect the level of awareness among users. Research is suitable on training and education to increase awareness.

5.6 Summary

This chapter presents a summary of the whole study. It also illustrated some of the main points in the study and suggested potential work for any future studies related to awareness security in smart phone.