Progress report

**Subject:** Progress of my research on students’ experiences regarding ransomware attacks.

**Introduction**

I have prepared this memo as a response to your request to provide information on the progress of my research project for Criminal justice. The project was devoted to students’ strategies for preventing and coping with ransomware attacks as well as interacting with law enforcement agencies. In my proposal, which I submitted on June 16, 2017, I specified that the research was focused on three primary objectives:

) Investigating precautions and safety recommendations, which students used to follow before ransomware attacks;

) Describing students’ responses to ransomware attacks, cooperation with law enforcement agencies, and relevant experiences;

) Identifying primary problems in students’ online safety practices, the work of law enforcement agencies, and their recommendations.

Obtaining this information is important because it could help to assess the effectiveness of the existing initiatives for the prevention of ransomware attacks and suggest possible improvements. As of the last report, I was preparing to submit the proposal and begin searching for suitable sources.

**Completed research**

As of June 20, 2017, I have completed all previously scheduled activities. Specifically, I had no problems with finding and researching necessary sources. The online library database and other tools such as Google Scholar were extremely helpful. In addition, recent ransomware attacks, including the spreading of WannaCry resulted in a revival of scholarly interest in this topic. Hence, I managed to locate necessary sources within an hour, not to mention that sources from the preliminary literature review were instrumental in gaining an understanding of this topic. Specifically, the article by McCarthy (2017) explained how ransomware works and what threats it can pose, helping to determine what question I might need to discuss with participants. Although I have not yet recruited and interviewed all participants, I have gained enough insights into the topic to prepare an outline and start writing a draft. I had to start interviews significantly earlier than I planned mainly because some students agreed to do so and often had no opportunity to participate later. However, such deviations from the original plans do not seem to create any delays.

The research has already provided valuable evidence. Firstly, findings of early interviews suggest that most respondents know very little about special recommendations of law enforcement agencies, regarding protection from ransomware or other software. However, most of them recognize pieces of advice from popular media, friends, and “common sense” requirements such as using antivirus protection, not visiting questionable websites or backing up any valuable information. Secondly, I have not found any participant who has reported the problem to the police or other agency. Most answers I have received suggest that students are reluctant to seek help because they are afraid that the whole process will be bureaucratized and useless. Most students prefer to simply delete problematic files and reinstall the operating system. Thirdly, it appears that most students cannot explain causes of their problem. Only one out of four students that I have interviewed claims to know the reason but is not certain. Some respondents reluctantly admit that some imprudence on their part could be the reason.

**Current challenges**

Despite a satisfactory progress, I encountered certain challenges. First of all, it was difficult to recruit participants willing to discuss this topic. Indeed, I quickly learned that most students felt embarrassed and humiliated by such experiences and were reluctant to admit their failures. In fact, self-reported bias could be another serious problem since most respondents showed signs of discomfort when answering questions. However, I cannot determine whether their replies were entirely sincere. For instance, there is a likelihood that many respondents could have reasonable suspicions, regarding questionable downloads or websites, but be reluctant to admit imprudence. Another problem is that the amount of information from the interviewees has already exceeded my expectations. Hence, I might need more time to complete the draft.

**Remaining work**

Since most respondents have not heard about recommendations of law enforcement agencies, I decided to introduce participants to these norms and ask them how consistent their usual Internet use habits were with these requirements and ask them to provide feedback. In such a way, I could gain new insights into the topic. Moreover, I would like to add a brief analysis of the effectiveness of the existing awareness initiatives devoted to ransomware and cyber security, based on my findings.

Furthermore, due to large amounts of work, I will need an additional day to complete the final draft. Other than that, I see no reasons for delays so that it is possible to complete the project by June 27. I still need to recruit and interview at least ten students. Based on their replies, I will be able to complete the draft and then revise it before submission.

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| Activity | Completion date and current status |
| Finding sources | 6/17 (C) |
| Preparing the outline | 6/18 (C) |
| Recruiting participants | 6/21 (I) |
| Interviewing the participants | 6/24 (I) |
| Preparing the draft | 6/25 (I) |
| Revising and proofreading the draft | 6/26 |
| Submitting | 6/27 |

**Figure 1:** The table showing the current progress of the project. “C” placed near the completion date means that the task is already complete. “I” represents work in progress. The absence of any signs means that the work has not yet started.

**Conclusion**

While I have not yet interviewed all actual and potential participants, it is already possible to make first conclusions. Nevertheless, it would be reasonable to recognize an analysis of the effectiveness of awareness initiatives as another research objective. Certainly, I encountered some issues in the process of preparing the research, but none of them is critical. Hence, I do not expect any additional delays.



**Figure 2:** An image depicting the essence of ransomware (Source: Esposito).

Reference

Esposito, J. (2016, May 3). *Expert tips to avoid falling victim to ransomware*. Retrieved from https://blog.kaspersky.com/expert-ransomware-tips/11974/

McCarthy, E. (2017).Only the Paranoid Survive. *CFA Institute Magazine*, 28(1), 40-42.