

University of Kent Survey on Cyber Security

In this first instalment of the Survey on Cyber Security organised by the University of Kent's Centre for Cyber Security (www.cybersec.kent.ac.uk), we asked the British people some general questions about their online experience, and obtained quite interesting results.

Initially, we wanted to test if the somehow surprising findings [1] of Google security researcher Elie Bursztein on the USA population were applicable to the UK. Our results, obtained using Google Customer Surveys, show that they are, indeed. When asked the question “Has anyone ever broken into any of your online accounts including email, social network, banking, and online gaming ones?” a surprising 18.3% (or approximately 1 in 5, virtually identical to the 18.4% found by Bursztein) answered positively. Even more worrying is possibly the fact that 6% of those surveyed said this had happened more than once (for 6.4% for USA-Bursztein). The results of this survey can be seen below in Figure 1.



Figure 1. Answers in the UK to the question *Has anyone ever broken into any of your online accounts including email, social network, banking, and online gaming ones?*

Further insights can be obtained from this data classified by age. Figure 2 below demonstrates that those aged in the range 55-64 answered “No” to this question rather more often than the rest- this result was consistent across areas and particularly acute in England (with 91.3% compared to an average of 70.4% – classification by region not included in figure). Of course, this can be interpreted in various ways: either they are more cautious online, or spend less time, have fewer activities and accounts, or perhaps keep an overall better security.

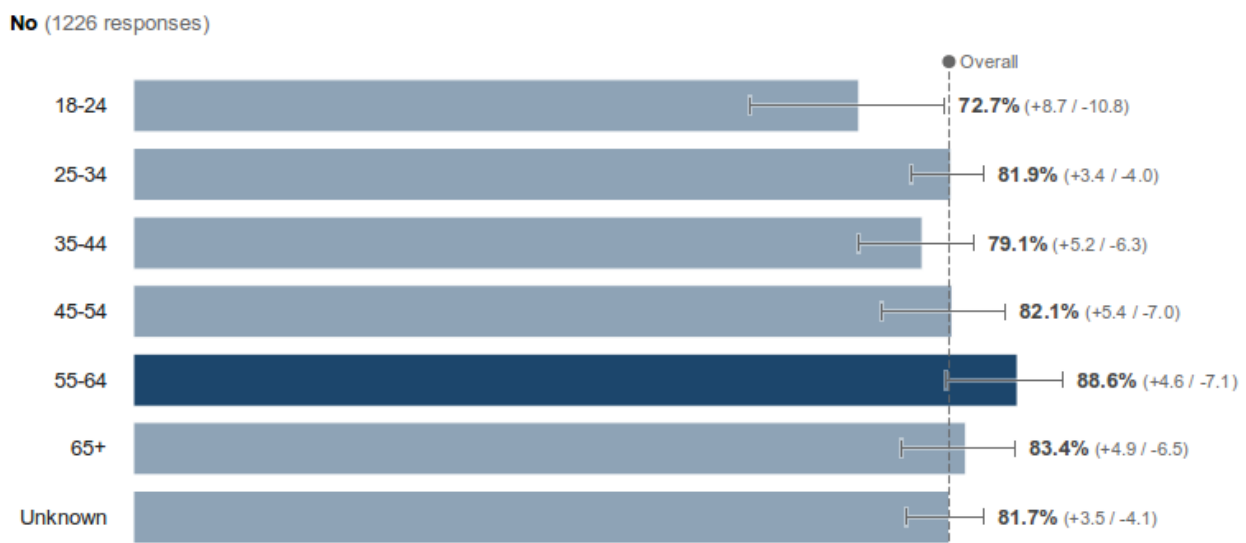


Figure 2. 'No' answers in the UK to the question *Has anyone ever broken into any of your online accounts including email, social network, banking, and online gaming ones?* classified by age

We investigated further whether these security compromises had any kind of undesirable financial implications for those affected. For that, we next arranged a survey with the question “How much money have you lost due to online or computer-based fraud in the last 2 years?” Once again we used Google Customer Surveys, interrogating more than 1,500 people. The results are quite interesting with a large majority of the people having lost nothing (83.1%) but a significant fraction of them (11.6%) having lost more than £65, for an average over the whole population of £1.50 in losses over the last two years due to online computer based fraud.

We tried to gain a better grasp on how cyber crime is affecting average citizens by running one last survey that delved into the topic opened by the last question. We asked “How much money have you lost in the last year due to any kind of computer criminal activity?” and the results were quite shocking (see Figure 3).



Figure 3. Answers in the UK to the question *How much money have you lost in the last year due to any kind of computer criminal activity?*

This time there was an even larger group of people not affected economically at all by online-crime losses, but there was a very significant percentage of the population (2.3%) that claimed to be quite badly hit with losses over £10,000. This admits a number of different interpretations, and we will try to learn a little more how and why in future surveys.

Conclusion

It seems that online crime has a clear impact on the lives of average UK citizens, with their accounts and credentials being compromised significantly and in some cases multiple times. This and other incidents online translate into financial losses that, despite not affecting large numbers of people, have quite a large impact on the few (around 3% of the population) that are very badly hit. We will continue to produce this survey and compare and analyze their findings in the future, to study how the numbers of online victims evolves over time.

Dr. Julio Hernandez-Castro & Dr. Eerke Boiten
 Interdisciplinary Centre for Cyber Security Research
 University of Kent, UK

Bibliography

[1] Eli Burzstein's study can be found at elie.im/blog/security/18-4-of-us-internet-users-got-at-least-one-of-their-account-compromised/