

## Supplementary materials for the paper

# Usability of Antivirus Tools in a Threat Detection Scenario

Michael Körber, Anatoli Kalysch, Werner Massonne, Zinaida Benenson: [Usability of Antivirus Tools in a Threat Detection Scenario](#). Published at [IFIP SEC 2022](#)

Authors' version:

<https://www.cs1.tf.fau.de/files/2022/07/2022-koerber-antivirus-usability-sec22-authors-version.pdf>

## Main Research Questions and Subsequent Questions

RQ1: Which design and user interaction elements of AV notifications help users under real-life circumstances to understand that a particular file was removed by an AV tool, and that this file might be malicious?

- Which user experience is triggered by AV tools in a threat detection scenario?
  - o Do users notice the AV notifications of their AV tools?
  - o Do users notice the AV actions (file removal) of their AV tools?
  - o Do users understand why AV notifications were issued?
  - o Do users understand why files were removed?
  - o Do users read AV notifications?
  - o Do users understand the content of AV notifications?
  - o Do users feel protected after their AV tool found a threat, or do they feel less protected than before?
- How do notifications and actions of AV tools interact with primary tasks of the users?
- What is the difference in user experience between the removal of a relevant and the removal of an irrelevant file?
  - o Do users leave files in quarantine or do they try to recover them?
  - o Which action users choose if they are asked by their AV tool what should happen to the file?
- How could design of AV notifications and actions be improved?

RQ2: What are users' attitudes to AV and their reasons for AV usage? Under which circumstances are users satisfied with their AV tools and feel well protected?

- What are the reasons for installing AV tools?
- Why was the particular AV tool chosen by the user?
- Do users consider their AV tools easy to use?
- Do users consider their AV tools effective?
- Do users trust their AV tools?
- Do users feel well protected by their AV tools?
- Are users satisfied with their AV tools?