

User's Susceptibility Factors to Malware Attacks: A Systematic Literature Review

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Abstract : Malware attacks due to end-user vulnerabilities have been noticeably increased in the past few years. Investigating the factors that make an end-user vulnerable to those attacks is critical because they can be utilized to set up proactive strategies such as awareness and education to mitigate the impacts of those attacks. Some existing studies investigated demographic, behavioral, and cultural factors that make an end-user susceptible to malware attacks. However, it has been challenging to draw more general conclusions from individual studies due to the varieties in the type of end-users and different types of malware. Therefore, we conducted a systematic literature review (SLR) of the existing research for end-user susceptibility factors to malware attacks. The results showed while some demographic factors are mostly associated with malware infection regardless of the end users' type, age, and gender are not consistent among the same and different types of end-users. Besides, the association of culture and personality factors with malware infection are consistent in most of the selected studies and for all type of end-users. Moreover, malware infection varies based on age, geographic location, and host types. We propose that future studies should carefully take into consideration the type of end-users because different end users may be exposed to different threats or be targeted based on their user domains' characteristics. Additionally, as different types of malware use different tactics to trick end-users, taking the malware types into consideration is important.

Keywords : cybersecurity, malware, end-users, demographics, personality, culture, systematic literature review

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