Risk Assessment in digital contexts

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Introduction

The fear of crime is a major topic of research in several disciplines. The work by Fisher & Nasar (1992) linking environmental attributes to the fear of crime and its subsequent development is a good example of the contributions made by environmental psychologists to the study of the fear of crime in urban settings.

Nowadays virtual settings are as familiar as the real ones for an increasing number of citizens worldwide. Cybercrime has become an objective risk and a source of worry, but fear and risk assessment have not been extensively studied yet. Alshalan (2009) reported that 80% of surveyed internet users in USA were "very worried" and found a higher fear among those previously victimized, those considering cybercrime as serious and among women. San Juan, Vozmediano & Vergara (2009) compared fear of cybercrime and street crime among residents in a safe city in Spain: they were more concerned by street crime, but the risk of being a victim of a cybercrime could be higher in this context.

Uses of the Internet are diverse (online banking, e-commerce, chatting…) and so are sources of risk and self-protection alternatives. This work presents a pilot study for evaluating actual risk of being a victim of a crime in an increasingly popular use of the Internet -social networks- compared to perceived risk of victimization. This is the first step in a research line aimed to go into the risk assessment in digital contexts.

Methods

Two instruments were developed. Objective risk was conceptualized by our team as a product of: system vulnerability, exposure, crime threat and measures for self-protection. If the three former variables are high and the latter is low, the risk would maximize. System vulnerability is inherent to the computer, the net and service used, and crime threat in a particular moment (number of motivated offenders) cannot be controlled by the user. Both will be considered as constants in our analysis. Therefore, exposure (time spent and variety of uses of the social networks) and self-protection (knowledge and use of the security settings of the service and security tips by experts) were measured. Subjective assessment of the risk was evaluated as it is usually done in the literature (estimated probability of suffering a cybercrime related to social networks in the next year). Socio-demographic variables were measured too. 50 college students (aged 18-25) users of social networks answered the questionnaire in this pilot phase. Data was collected through the online survey platform of the University of the Basque Country.

Results and discussion

First results of the pilot study endorse the usefulness of the proposed instruments to evaluate risk assessment in online social networks in contrasts to objective risk. Proposed questionnaire could be used to make Internet users aware of their current level of self-protection, and motivate them to increase the measures if they are insufficient or relax them if exaggerated.

Results encourage the team to extend the research line to other uses of the Internet such as online banking or e-commerce in the near future.

References

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