

RESILIENCE TO ONLINE PRIVACY VIOLATION: THE ROLE OF SOCIO-DEMOGRAPHIC ATTRIBUTES

Jelena Budak, Bruno Škrinjarić, Edo Rajh

Institute of Economics, Zagreb

VIII REDETE Conference
Niš, September 3, 2021

Privacy online and resilience

- Preserving privacy when online is for many people a matter of security in the digital age
- Perceived risk of privacy violation online shapes individual attitudes and actions (Anić et al., 2019)
- Resilience to actual privacy breaches online is affecting Internet users' behavior as well
- Resilience in its interdisciplinary nature is a multifaceted holistic concept (Budak et al., 2021)
- Resilient individuals would cope with the stress more easily, would adapt to the situation after the incident and recover faster when compared to less resilient individuals.

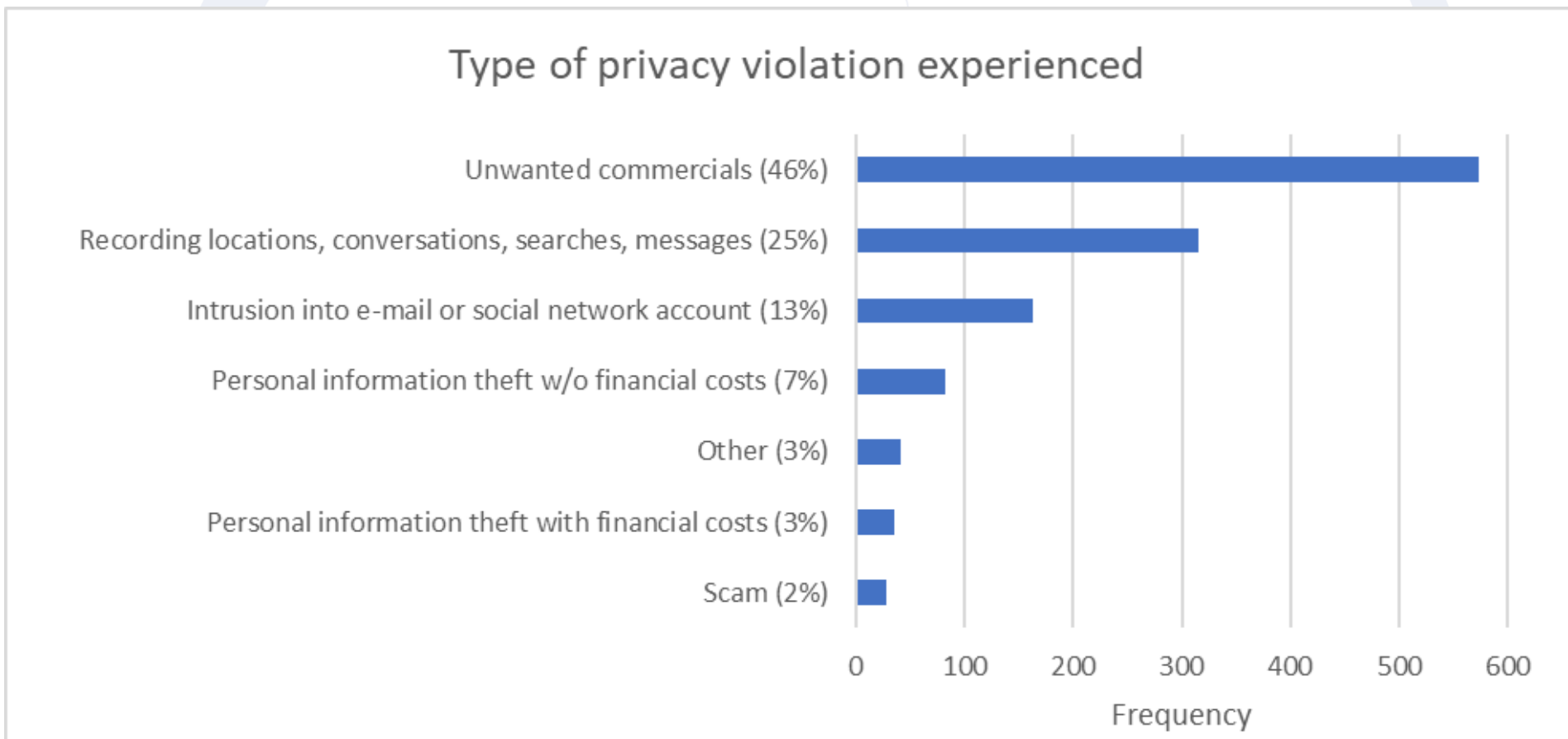
Individual resilience to privacy violation online

- We apply individual resilience concept that intertwines consumer behavior, privacy violation and online environment
- We empirically investigate the individual resilience of Internet users to privacy violation online they've experienced, in relation to their profiles and attitudes
- Social and demographic characteristics: gender, age, occupation, education, household income, region, urban/rural
- *Subjective* notion of privacy violation online

Survey data and methodology

- The research is based on the survey data on Internet users in Croatia who reported to have experienced privacy violation online in a period of three years prior to the survey.
- Net sample of 1000 Internet users in Croatia aged >18 years; the sample was two-way stratified by region and settlement size.
- The survey questionnaire developed by the co-authors.
- The fieldwork was conducted using Computer Assisted Telephone Interviewing (CATI) in a period from January to February 2021.

Privacy violation online incidents



Other self-evaluations

- **Personal information theft** with and w/o financial costs rated as the **most severe** privacy incidents
- Respondents' need to obtain information /services on the Internet is greater than their online privacy concern
- Respondents' online **privacy awareness rated as good**; familiar with GDPR and privacy policies

Privacy violation cases by age

- **unwanted commercials** are perceived as privacy violations online dominantly by **the oldest** age group of Internet users
- **recording location, conversations**, etc. is viewed and experienced as privacy incident mostly by **younger** Internet users.
- **intrusion into e-mail or social network account** were mostly experienced by **the youngest** Internet user population
- more **victims of personal information theft with financial loss** are **younger** Internet users !

Privacy violation cases by education, occupation, region

- Unexpectedly low number of incidents reported by the less educated respondents
- The highest educated Internet users experienced much theft of personal data w/o financial loss
- High incidence of scam and personal information theft w/o financial loss for managers; students and retired underreported scams
- Regional differences and urban/rural deviations observed
- Differences not observed in terms of gender and income

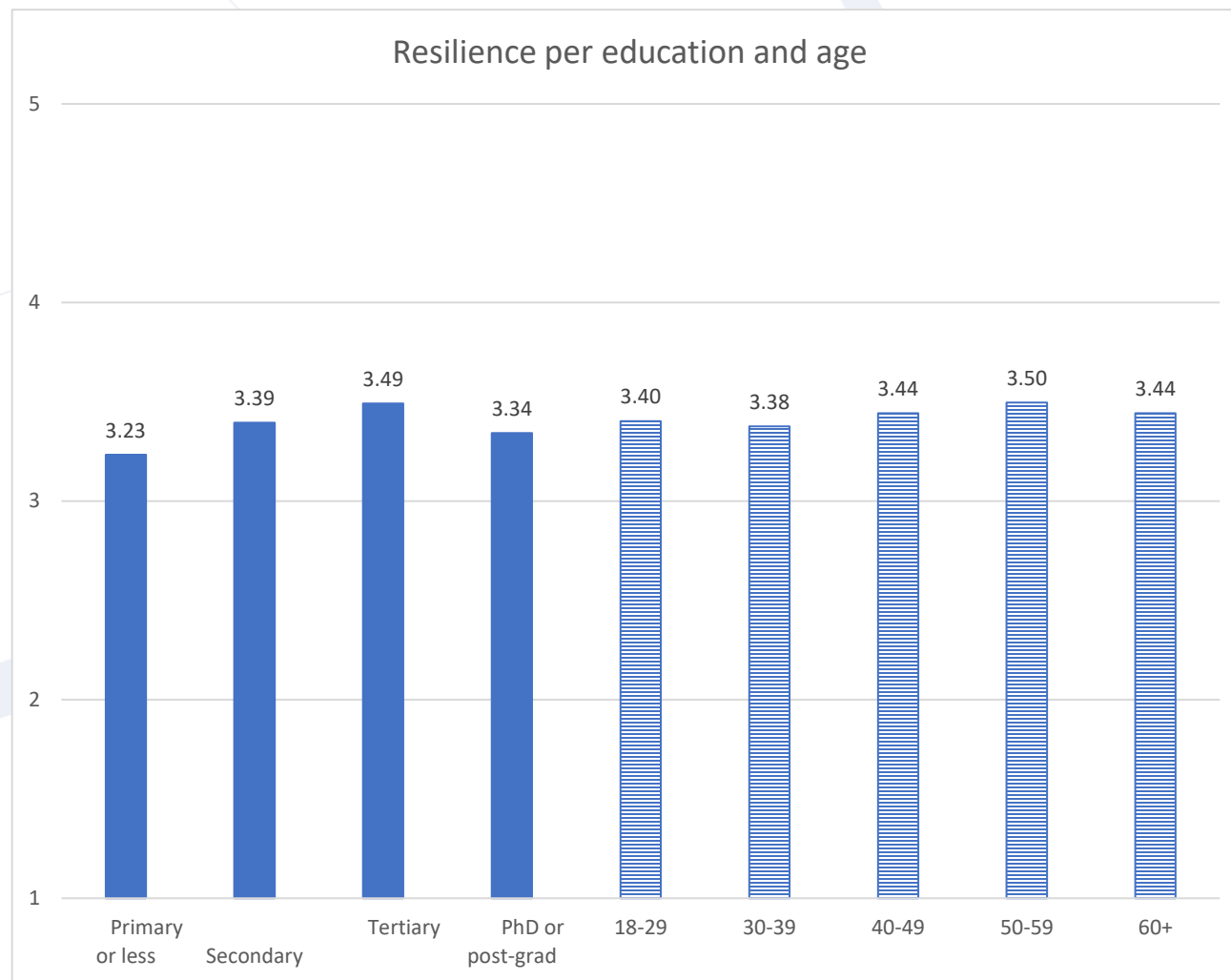
Resilience surveyed

- 6-item resilience scale adapted from Smith, 2009
- Measuring subjective assessment of the time of recovery and adaption capacity
- Internet users on average recover **quickly** and had not much trouble to come through the most recent privacy violation online incident (3.55 score on the 5-point Likert scale)



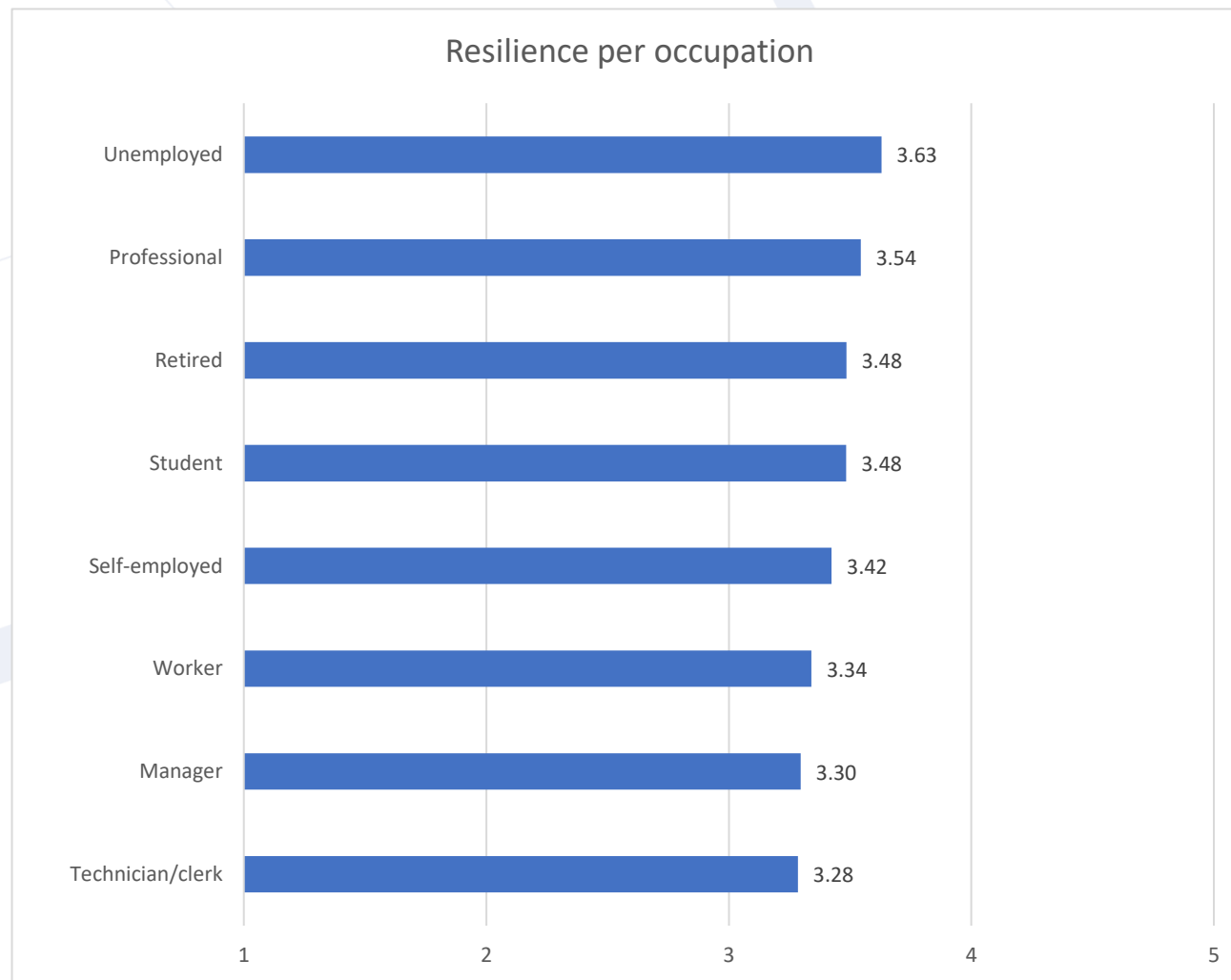
Resilience per education and age

- Internet users with primary (lowest) education level attained, showed to be less resilient
- One would expect younger respondents to be more resilient; this is not the case
- All age groups are about score 3.4
- Age group 50-59 slightly more resilient



Resilience per occupation

- Unemployed exhibited more resilience
- Among less resilient occupations stand technicians/clerks and managers
- More resilient Internet users live in northern part of Croatia and in smaller settlements.
- No difference observed in terms of gender and household income.



Conclusion remarks

- Internet users in Croatia consider **unwanted commercials and recording locations**, conversations, messages, searches as **the main types of violation** of their online privacy.
- Most of privacy violation online problems arise from **insufficient education regarding the online privacy and from lacking digital competences** when using various digital services.
- An average Internet user recovers rather fast after privacy violation incident.
- **Variations in resilience by socio-demographic attributes of Internet users are slight**; there are some differences in the level of resilience among different socio-demographic groups.
- **Socio-demographic variables affect**, to a certain degree, **resilience to online privacy violation**.

Future research

- Socio-demographic variables should be included in any theoretical model of antecedents of resilience to online privacy violations.
- Given slight variations observed, in order to better understand interrelationship between socio-demographic variables and resilience, future studies should conduct **more in-depth analysis of resilience of certain socio-demographic groups**.
- Future studies might focus on **longitudinal aspect** of this phenomenon and explore how resilience changes as individuals' socio-demographic characteristics change over time.
- In the next step, one should analyze how Internet users adjust their **consumption habits** after experiencing some form of adversity situation.
- Develop the concept of **adaptive responses** since antecedents and consumer behavior consequences in this domain remain under-explored. This is particularly valid in the online context which is gaining importance with increasing digitalization of the entire value chain.

Thank you for your attention!

Q & A ?

jbudak@eizg.hr

*This work has been fully supported by the Croatian Science Foundation
under the Project IP-2019-04-7886.*