# PSYCHOMETRIC CHARACTERISTICS OF SELF-EFFICACY AND OPTIMISM AND PESSIMISM MEASUREMENT SCALES IN ONLINE PRIVACY VIOLATION CONTEXT

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### ABSTRACT

Self-efficacy, optimism and pessimism variables are to be included as antecedents in the model of individual resilience to privacy violation online. The Self-Efficacy, Optimism, and Pessimism scales borrowed from the literature were adapted for measuring personal attributes of an individual Internet user who experienced privacy violation incident online. The data were collected by the telephone survey of Internet users in Croatia aged 18 years or older reaching the net sample of over 1000 respondents. The sample structure was determined according to the Eurobarometer 91.1 and the sample was two-way stratified by region and settlement size. This paper assesses psychometric characteristics of three adapted scales to test their applicability in explaining the level of resilience after the privacy violation online incident. The Cronbach alpha coefficient and explorative and confirmative factor analysis were applied. The abbreviated versions of the original scales have satisfactory psychometric characteristics because research results indicate good reliability, discriminant and convergent validity and the expected dimensionality of the tested scales. The paper contributes to the existing body of knowledge by providing validated shortened measurement scales for including psychological and personal factors in the future inter- and cross-disciplinary studies.

KEY WORDS: self-efficacy, optimism, pessimism, privacy violation online, measurement scale, psychometric characteristics

### **1. INTRODUCTION**

Individual privacy and resilience to privacy violation need to be explored in contemporary context of digital environment. The subjective perceptions of preserving privacy and individual resilience to privacy breaches shape individual behavior. Online actions and reactions have further implications to offline behavior in many social and economic aspects of life. The direction and intensity of individual responses to privacy violation online depend on the level of their online privacy concern (Anić et al., 2019), on the subjective evaluation of a privacy violation incident a person has gone through, and on the level of resilience to such a stressful event. To better understand the individual behavior of Internet users in this context, a model of individual (consumer) resilience to privacy online violation should be developed and tested (Budak et al., 2021). In the consumer resilience model, antecedents include, among other determinants, a range of personality variables. Namely, psychological factors affect the individual capacity to cope with and to adapt to a (negative) stressful event (Luthans et al., 2006), and there is a literature-based argument to include them in the research on individual resilience (Fredrickson, 2001; Joseph & Linley, 2006; Carver, Scheier, & Segerstrom, 2010).

However, as a necessary precondition to include self-efficacy, optimism and pessimism as psychological factors in the empirical research of individual resilience to online privacy violation, a reliable scale to measure the theoretical construct is required. The aim of this paper is to test the adapted self-efficacy, optimism, and pessimism measurement scales used in the construction of self-efficacy (SEF), optimism (OPT) and pessimism (PES) variables in the resilience to privacy

violation online model. Specifically, the psychometric characteristics of the adapted scales are tested in terms of their reliability, discriminant and convergent validity, and the dimensionality.

The rest of the paper is organized as follows. Reasoning behind including the self-efficacy, optimism and pessimism as antecedents in the consumer resilience to online privacy violation model is elaborated in the next section. Survey data and methodology is described in section 3 and the results of testing the measurement scales are presented in section 4. The last section discusses the results in the context of future research of consumer resilience to privacy violation online.

#### 2. PSYCHOLOGICAL FACTORS AFFECTING INDIVIDUAL RESILIENCE

Resilience is a multifaceted concept used in a wide variety of disciplines (Bhamra, Dani, & Burnard, 2011). There is an abundant literature exploring ecological resilience, natural disaster resilience, and community resilience to adverse situations (Brand & Jax, 2007; Martin-Breen & Andreis, 2011; Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum, 2008). Whether it considers the resilience of a society or an individual resilience to a stressful event, the psychological resilience plays a crucial role in the process of recovery (Luthans, Vogelgesang & Lester, 2006). An individual resilience is defined as the capacity of a person to recover from the adversity or as a process to cope with it (e.g., Bartone, 1989; Cicchetti & Garmezy, 1993; Dyer & McGuinness, 1996; Connor & Davidson, 2003; Visser, 2007; Kotzé & Nel, 2013). Smith et al. (2008) define resilience as a capacity of an individual to 'bounce back' and recover after the stressful situation. This resilience concept is often used in psychology, medical studies, criminology, and business economics (e.g., Rumgay, 2004; Gilgun, 2005; Deans & Garry, 2013).

Past research on individual resilience recognized personality variables as one of the explanatory factors of resilience in different contexts (Joseph and Linley, 2006; Herrman et al., 2011). The most important antecedents to personal resilience include different psychological factors such as self-esteem, personality traits, locus of control, optimism, and self-efficacy (e.g., Joseph & Linley, 2006; Nakaya, Oshio & Kaneko, 2006).

Therefore, in investigating psychological factors as antecedents in the model of consumer resilience to privacy violation in an online environment, self-efficacy emerges as a potentially significant variable (Gu & Day, 2007) that assesses optimistic self-beliefs that help in coping with a variety of stressors in life. In other words, following the Schwarzer and Jerusalem (1995) argument, we posit that a person dealing efficiently with unexpected events and capable to solve problem efficiently, might benefit from these abilities in coping with a privacy violation event more successfully. Selfefficacy is frequently included in the psychological and organizational studies because it is recognized that it improved our understanding of behavior both in theory and practice (Chen, Gully & Eden, 2001).

Optimism is a well-known and widely used psychological factor<sup>1</sup>, meaning that person maintains positive expectancies for future events or outcomes (Carver, Scheier & Segerstrom, 2010). Carver and Scheier (2014) noted the importance of expectancies increases primarily when hurdles appear. In the individual resilience literature, it has been evidenced that victims maintaining optimism for the future and hope (Snyder, 2000) easily persist and accept difficulties. Optimism has been associated with self-reported well-being among long-term breast cancer survivors (Carver et al., 2005), psychological adjustment during a life transition (Brissette et al., 2002), and reduced traumatic syndrome after an earthquake (Ahmad et al., 2010). When encountering adversity, maintaining optimism for the future can provide the stamina to endure, but optimism alone is not sufficient to foster resilience.

In line with this definition, the optimism - pessimism concept is understood as a generalized expectation of positive or negative outcomes of activities oriented towards future events and expectation of the future results. On the other hand, some authors of this concept attempt to define it as a broader, positive or negative view of the world, applicable to current events and situations. Optimism and pessimism are relatively stable personality dimensions (Scheier & Carver, 1985). There is still no consensus about unidimensionality of optimism – pessimism and more studies are needed to resolve whether optimism is a bipolar dimension or optimism-pessimism are two separable dimensions (Carver & Scheier, 2014). The optimism-pessimism scale tested here originally assumes optimism and pessimism should be seen as two partially independent dimensions (Chang et al., 1994). Based on the results of the previous research for Croatia, Penezić (1999) shown that between the optimism and pessimism there is a high negative correlation, and these two constructs are basically two different dimensions, not two poles of the same dimension (Penezić, 2002) and must be encountered in parallel as antecedents of individual resilience.

<sup>&</sup>lt;sup>1</sup> The review of abundant literature on optimism and pessimism goes beyond the scope of this research. For more details on including optimismpessimism in the diverse research studies, see for example Chang (Ed.), 2001.

#### 3. DATA AND METHODOLOGY

#### 3.1. Survey data and methodology

This 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. The target population were Internet users in Croatia aged 18 years old or older. The sample structure was determined according to the Eurobarometer 91.1 (European Commission & European parliament, 2019). The sample was two-way stratified by region and settlement size.

The survey questionnaire, developed by the co-authors, had two filter conditions. Firstly, potential respondent had to be an Internet user; and, secondly, had to have experienced some kind of privacy violation on the Internet in the last three years.

The fieldwork was conducted using Computer Assisted Telephone Interviewing (CATI) in a period from January to February 2021. The questionnaire was programmed and tested before the pilot interviews. The response rate was 4.6% and the average final questionnaire length was 23.32 minutes. The net sample consists of 1000 Internet users who had experienced online privacy violation.

Sample characteristics in terms of gender, age, number of people living in the household of respondent, education and occupation of respondent, household income, region (counties and NUTS2 regions in Croatia), and settlement size of respondent's place of residence are presented in Appendix.

#### 3.2. Measurement scales employed to measure self-efficacy, optimism and pessimism

Self-Efficacy scales used in the personality and psychological studies are mostly derived from the General Self-Efficacy Scale developed by Sherer et al. (1982). These measurements scales were adapted, and the new ones created to better measure general self-efficacy or to be adequate to measure self-efficacy in the specific context. For example, Chen, Gully and Eden (2001) developed the New General Self-Efficacy Scale based on Generalized Self-Efficacy scale developed by Schwarzer et al. (1997). Explaining the details of methodological developments of self-efficacy measurement scales and of the number of specific adaptations that followed are beyond the scope of our study. However, every methodological improvement or change in the measurement scale is that the adapted scales need to be validated.

In the resilience to privacy violation online context, the self-efficacy variable (SEF) is assessed by using the Generalized Self-Efficacy (GEF) from Schwarzer et al. (1997) as well.

In the original GEF scale ten items are evaluated by 4-point Likert scale ranging from 1=Not at all true, 2=Barely true, 3= Moderately true, to 4= Exactly true (Schwarzer et al., 1997). To measure self-efficacy (SEF) in the resilience to privacy violation online survey, the original GEF scale has been adapted by shortening to the following four items:

sef\_1 It is easy for me to stick to my aims and accomplish my goals.

sef\_2 Thanks to my resourcefulness, I know how to handle unforeseen situations.

sef 3 I can solve most problems if I invest the necessary effort.

sef\_4 I can remain calm when facing difficulties because I can rely on my coping abilities.

Compared to the original GEF scale, the 5-point Likert scale was used. Answers to what extent respondent agrees with the statements ranged from 1 = Absolutely no, 2 = No, 3 = Neutral, 4 = Yes, to 5 = Absolutely yes.

To measure optimism (OPT) and pessimism (PES) variables we have borrowed the original Optimism-Pessimism (O-P) measurement scale developed by Chang (as described in Chang et al., 1997)<sup>2</sup>, and containing six items to measure optimism and nine items to measure pessimism (at 5-point Likert scale).

The original O-P scale (Chang et al., 1997) is adapted for this research by shortening the number of items. Three items from the original optimism scale (opt 1-3) and three items from the original pessimism scale (pes 1-3) were used in the questionnaire, as shown in Table 1.

<sup>&</sup>lt;sup>2</sup> In constructing the O-P measurement scale Chang et al. (1997) adapted and verified Life claims Orientation Test (LOT) by Scheier and Carver (1985) and Optimism-Pessimism Scale (OPS) by Dember et al. (1989).

Latent construct	Items	Description		
Self-efficacy (SEF)	sef_1	It is easy for me to stick to my aims and accomplish my goals.		
	sef_2	Thanks to my resourcefulness, I know how to handle unforeseen situations.		
	sef_3	I can solve most problems if I invest the necessary effort.		
	sef_4	can remain calm when facing difficulties because I can rely on my coping abilities.		
Optimism (OPT)	opt_1	I always look on the bright side of things.		
	opt_2	I'm always optimistic about my future.		
	opt_3	In general, things turn out all right in the end.		
Pessimism (PES)	pes_1	Rarely do I expect good things to happen.		
	pes_2	In general, things turn out all right in the end.		
	pes_3	Rarely do I expect good things to happen.		

Table 1. Description of items used to build latent constructs

Answers to what extent respondent agrees with the statements were given at 5-point Likert scale ranging from 1 = Absolutely no, 2 = No, 3 = Neutral, 4 = Yes, to 5 = Absolutely yes.

Downsizing the original scales to a relatively small number of items (4 statements for SEF, 3 for OPT and 3 for PES) is seen as a necessary adaptation for several reasons. Firstly, questions on SEF, OPT, and PES were part of the large survey that had to cover multiple variables, and given it was conducted by CATI method, the telephone interviews should not last for more than about 20 minutes. In shortening the original GEF and O-P scales, preference was given to items that would reflect the best self-efficacy variable and optimism-pessimism variables to be afterwards included in the consumers' resilience to online privacy violation model.

The adaptation of scales requires validation and testing their psychometric characteristics that is in the focus of this work.

### 3.3. Methods of testing the measurement scales

The reliability of the measurement scale is analyzed by Cronbach alpha coefficient (CA), Alpha-if-deleted indicator and by a range of correlation analyses. CA coefficient is used as a measure of scale reliability because it measures internal consistency, that is, how closely related a set of items are as a group. CA ranges from 0 to 1 where higher values of CA coefficient (closer to 1) indicate high covariations of all items in the measurement scale. The high values of CA coefficient means that every statement (item in the scale) measures the same latent variable i.e., the same basic concept (in our case, self-efficacy, optimism, and pessimism). The 'good' CA coefficient should be at least 0.65-0.8, and scores below 0.5 are generally not acceptable, in particular for one-dimensional scales (Kline, 1998). Item-test correlation indicates how strong is the correlation between every single item in relation to the rest of the items in the scale. The greater the value of the coefficient, the stronger is the correlation between the item and the total scale. Alpha-if-deleted coefficient is used for measuring the internal consistency of the scale. It denotes how the CA coefficient would change if an item would be removed from the scale. Namely, if the removal of one item would significantly increase CA coefficient, the exclusion of that particular item from the measurement scale is advised.

However, the high value of CA coefficient does not mean that the measurement scale is one-dimensional. The dimensionality of the scale is tested by exploratory and confirmatory factor analyses with measurement models where each manifest variable only loads on one latent variable, and with the assumption of the independence of measurement errors (Gerbing & Anderson, 1988; Kline, 1998).

Exploratory factor analysis (EFA) is a measurement technique used to examine the structural relations among variables. It is used when both observed and latent variables are assumed to be measured at the interval level. Confirmatory factor analysis (CFA) is a multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs. Confirmatory factor analysis (CFA) therefore is used to test the assumed relations among manifest and latent variables (Hair, Black, Babin, Anderson & Tatham, 2006; Kline, 1998) and it is considered more rigorous test of convergent validity (Yoo, Donthu & Lee, 2000).

### 4. RESULTS

Descriptive statistics for all the items used to measure latent constructs in our analysis is presented in Table 2.

Table 2. Construct item descriptive statistics

Latent construct	Items	Inter-item correlation	Item-rest correlation	Cronbach alpha	Alpha-if-deleted
	opt_1	0.5329	0.6801		0.6953
Optimism (OPT)	opt_2	0.4893	0.7151	0.8021	0.6571
	opt_3	0.7013	0.5541		0.7944
Pessimism (PES)	pes_1	0.5062	0.6877		0.6721
	pes_2	0.5976	0.6166	0.7971	0.7481
	pes_3	0.5961	0.6178		0.7469
Self-efficacy (SEF)	sef_1	0.5234	0.5441		0.7672
	sef_2	0.4644	0.6341	0 701 2	0.7223
	sef_3	0.4872	0.5987	0.7912	0.7402
	sef_4	0.4707	0.6242		0.7273

EFA was conducted to test convergent validity of a measurement scales, as well as to preliminary test their dimensionality. Principal component was used as a method of factor extraction and Kaiser-Guttman rule was used as a method for determining the number of extracted factors. Kaiser-Guttman rule specify that factors with eigenvalues greater than 1 are retained. Table 4(A) shows EFA results.

Table 3. Exploratory factor analysis results

Factor	Eigen values	Cumulative eigen values	Percentage of explained variance	Cumulative percentage of explained variance	
1	3.8252	3.8252	0.8458	0.8458	
2	1.2588	5.0840	0.2783	1.1241	
3	0.1278	5.2118	0.0283	1.1523	
4	0.0160	5.2278	0.0035	1.1559	
5	-0.0432	5.1846	-0.0095	1.1463	
6	-0.0798	5.1048	-0.0176	1.1287	
7	-0.1227	4.9822	-0.0271	1.1016	
8	-0.1337	4.8484	-0.0296	1.0720	
9	-0.1527	4.6957	-0.0338	1.0382	
10	-0.1729	4.5228	-0.0382	1.0000	

#### Panel A: Eigen values

Latent construct	Item	F1	F2	F3
	opt_1	0.7312		
Optimism (OPT)	opt_2	0.7322		
	opt_3	0.5706		
	pes_1	-0.7962		
Pessimism (PES)	pes_2	-0.6553		
	pes_3	-0.7055		
	sef_1		0.5985	
	sef_2		0.7032	
Sell-efficacy (SEF)	sef_3		0.6502	
	sef_4		0.6814	

Panel B: Eigen vectors

Notes: Principal factor method was used, and factors were rotated using orthogonal varimax rotation.

EFA results indicate that SEF measurement scale is unidimensional. All SEF items have high factor loadings on their respective factor (Table 4(B)). EFA results also indicate that SEF scale poses the attribute of convergent validity. Therefore, the initial set of four SEF items can be considered as one measurement scale for measuring self-efficacy. Empirical evidence does not support theoretical notion of OPT and PES as two separate measurement scales, but rather as opposite poles of the same measurement scale.

Figure 1. Confirmatory factor analysis model structure



Convergent validity was also assessed with confirmatory factor analysis (CFA), with two latent variables (constructs), one for SEF, and another for PES and OPT as elements of one measurement scale (Figure 1).

Item	Factor	Model estimates		
opt_1	Factor1	1.000 (.)		
opt_2	Factor1	1.038*** (0.038)		
opt_3	Factor1	0.764*** (0.037)		
pes_1	Factor1	-1.226*** (0.050)		
pes_2	Factor1	-0.935*** (0.046)		
pes_3	Factor1	-1.046*** (0.049)		
sef_1	Factor2	1.000 (.)		
sef_2	Factor2	1.143*** (0.067)		
sef_3	Factor2	1.039*** (0.062)		
sef_4	Factor2	1.179*** (0.069)		
I	V	1,000		
$\chi^2$ sta	itistic	292.17***		
RM	SEA	0.087		
G	FI	0.929		
C	FI	0.936		

Table 4. Confirmatory factor analysis results

Note: (\*\*\*) denotes significance level p<0.01. RMSEA = Root mean square error of approximation, GFI = Goodness of fit index, CFI = Comparative fit index.

Fit indices indicate acceptable level of fit of measurement model to empirical data. CFA results further confirm EFA results (in Table 5). All analyzed items load on their respective factors and all loadings are statistically significant. Both SEF scale and combined OPT-PES scale have acceptable level of convergent and discriminant validity. Results also indicate that both scales are unidimensional.

### **5. CONCLUSION**

Psychological factors are increasingly used in business and economic research and dominantly as explanatory variables in consumer behavior research models. In assessing consumer resilience to privacy violation online, a new model is to be developed and empirically tested. A list of antecedents suggested in the literature, among others, includes self-efficacy, optimism, and pessimism variables (Budak et al., 2021). Adaptation of these measurement scales to the individual resilience to the privacy violation online research model requires careful examination of the appropriateness of the scales used. Therefore, this paper tested adapted self-efficacy and optimism-pessimism measurement scales.

Empirical results indicate that both SEF scale and combined OPT-PES scale exhibit the acceptable level of reliability, as well as convergent and discriminant validity. Dimensionality of SEF scale is in accordance with the literature. Results also indicate that OPT-PES scale is unidimensional scale with OPT and PES as opposite poles of one scale, rather than two separate scales. The contribution of this paper to the body of the empirical research is in practical implications for the researchers willing to apply these scales in business and interdisciplinary research of individual behavior. Compared to previous research, we offer a unique research approach to this new and unexplored aspect of consumer behavior in the digital environment. Including different measures of personal and psychological factors in the research fields other than psychology is essential for getting deeper insight in determinants of individual behavior in economics and business, political sciences, sociology, and other disciplines. The main contribution of the paper is that it offers adapted short measurement scales which could be used within wider research framework, e.g., as a part of larger surveys. The tested measurement scales possess appropriate psychometric characteristics and therefore could be used in the future empirical research together with other scales that measure different theoretical concepts in the online consumer behavior domain. In consumer behavior studies, self-efficacy, optimism, and pessimism could explain consumer characteristics and habits, as well as the type and range of consumer activities, in particular consumer behavior online. Specifically, we foresee the future use of two tested scales, SEF scale and

combined OPT-PES in applicative research studies aiming to develop adequate consumer protection policies in the online environment. Adding the analyzed scales in assessing the consumer resilience to online privacy violation would contribute to the overall understanding of this complex phenomena in the digitalized environment.

This research has its limitations, primarily because the measurement scales were tested on the sample of one country in specific social and cultural setting and may not be generalized beyond the national context of Croatia. Therefore, the suggested line of the future research is the empirical validation in other countries with different socio-economic and cultural environments. Further constraint to the scope of the research is that scales were tested at the representative sample of adult consumers. Since children and teenagers 17 years old and younger are also active Internet users and online consumers from their early age, including them in the future studies would mitigate this shortcoming. Likewise, the level of self-efficacy, optimism and pessimism certainly changes over the course of ones' lifetime, which is nowadays even accelerated with rapid technological advancements. This research presents a one snapshot in time so future studies should also include the time component. Finally, although the notions of self-efficacy, optimism and pessimism terms appear in various domains, it was not possible to include all theoretical contributions related to them in this review.

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Apper	idix:	Samp	le st	ructure
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Variable	Frequencies (N=1000)	Relative frequencies	St. Dev.	Min	Max
Gender*					
Female	513	51 %	0.50	0	1
Male	487	49 %	0.50	0	1
Age*		43.31	15.88	18	86
Age categories					
18-29	253	25 %	0.43	0	1
30-39	184	18 %	0.39	0	1
40-49	186	19 %	0.39	0	1
50-59	187	19 %	0.39	0	1
60+	190	19 %	0.39	0	1
Number of people in household*		3.35	1.42	1	10
Education					
Primary or less	20	2 %	0.14	0	1
Secondary	518	52 %	0.50	0	1
Tertiary	426	43 %	0.49	0	1
PhD or post-grad	36	4 %	0.19	0	1
Occupation of respondent					
Self-employed	50	5 %	0.22	0	1
Manager	45	5 %	0.21	0	1
Professional	160	16 %	0.37	0	1
Technician/clerk	191	19 %	0.39	0	1
Worker	191	19 %	0.39	0	1
Retired	159	16 %	0.37	0	1
Student	111	11 %	0.31	0	1
Unemployed	93	9 %	0.29	0	1
Household income					
Up to 2.000 HRK	12	1 %	0.11	0	1
2.501-3.500 HRK	26	3 %	0.16	0	1
3.501-5.000 HRK	64	6 %	0.24	0	1
5.001-6.500 HRK	80	8 %	0.27	0	1
6.501-8.000 HRK	98	1 %	0.30	0	1
8.001-10.000 HRK	131	13 %	0.34	0	1
10.001-12.000 HRK	130	13 %	0.34	0	1
12.501-15.000 HRK	123	12 %	0.33	0	1

15.001-20.000 HRK	74	7 %	0.26	0	1
> 20.001 HRK	39	4 %	0.19	0	1
No answer	223	22 %	0.42	0	1
County of the respondent					
Zagrebacka	93	9 %	0.29	0	1
Krapinsko-zagorska	24	2 %	0.15	0	1
Sisacko-moslavacka	50	5 %	0.22	0	1
Karlovacka	34	3 %	0.18	0	1
Varazdinska	43	4 %	0.20	0	1
Koprivnicko-krizevacka	28	3 %	0.17	0	1
Bjelovarsko-bilogorska	26	3 %	0.16	0	1
Primorsko-goranska	89	9 %	0.28	0	1
Licko-senjska	8	1 %	0.09	0	1
Viroviticko-podravska	9	1 %	0.09	0	1
Pozesko-slavonska	14	1 %	0.12	0	1
Brodsko-posavska	19	2 %	0.14	0	1
Zadarska	44	4 %	0.21	0	1
Osjecko-baranjska	96	1 %	0.29	0	1
Sibensko-kninska	15	2 %	0.12	0	1
Vukovarsko-srijemska	15	2 %	0.12	0	1
Splitsko-dalmatinska	124	12 %	0.33	0	1
Istarska	48	5 %	0.21	0	1
Dubrovacko-neretvanska	25	3 %	0.16	0	1
Medimurska	33	3 %	0.18	0	1
City of Zagreb	163	16 %	0.37	0	1
Region (NUTS 2) of respondent*					
Panonian Croatia	263	26 %	0.44	0	1
Adriatic Croatia	353	35 %	0.48	0	1
City of Zagreb	163	16 %	0.37	0	1
North Croatia	221	22 %	0.42	0	1
Settlement size					
10,000 or less	309	31 %	0.46	0	1
10,001–50,000	296	30 %	0.46	0	1
50,001-100,000	79	8 %	0.27	0	1
More than 100,000	316	32 %	0.47	0	1

Note: \* Here we present averages rather than frequencies. 1 EUR ~ 7.5 HRK.

## PSIHOMETRIJSKE KARAKTERISTIKE LJESTVICA ZA MJERENJE SAMO-EFIKASNOSTI, OPTIMIZMA I PESIMIZMA U KONTEKSTU POVREDE PRIVATNOSTI ONLINE

## SAŽETAK

Uključivanje varijabli samoefikasnosti, optimizma i pesimizma kao determinanti u model individualne otpornosti povrede privatnosti online zahtjeva ispitivanje adekvatnosti mjernih ljestvica samo-efikasnosti, optimizma i pesimizma. Navedene mjerne ljestvice preuzete su iz literature i prilagođene za mjerenje osobnih obilježja Internet korisnika koji su doživjeli neku vrstu povrede privatnosti online. Podaci su prikupljeni telefonskom anketom korisnika Interneta u Hrvatskoj u dobi od 18 godina i starijih na neto uzorku od više od 1000 ispitanika. Struktura uzorka određena je prema Eurobarometru 91.1, a uzorak je dvostruko stratificiran prema regiji i veličini naselja. U ovom se radu ispituju psihometrijske karakteristike tri prilagođene mjerne ljestvice i testira njihova adekvatnost u objašnjavanju razine otpornosti nakon događaja povrede privatnosti online. Podaci su analizirani izračunom Cronbachovog alfa koeficijenta te eksplorativnom i konfirmativnom faktorskom analizom. Skraćene verzije izvornih mjernih ljestvica posjeduju zadovoljavajuće psihometrijske karakteristike budući da posjeduju svojstva pouzdanosti, diskriminantne i konvergentne valjanosti, te očekivane dimenzionalnosti. Rezultat rada su valjane skraćene mjerne ljestvice koje omogućuju uključivanje psiholoških i faktora osobnosti u buduća interdisciplinarna istraživanja, čime rad doprinosi postojećoj literaturi.

**KLJUČNE RIJEČI:** samoefikasnosti, optimizam-pesimizam, povreda privatnosti online, mjerna ljestica, psihometrijske karakteristike