Can Social Privacy as a Value be Measured Reliably within a Romanian and German Sample, and Can It Explain Different Privacy-Related Behaviors?

Russa Miruna-Elena

s2795426

Department of Psychology, University of Twente

Mod 12: BSc Thesis

Supervisor: Nicole Huijts

Date: 28th of June 2024

Word Count: 7082

Can Social Privacy as a Value be Measured Reliably within a Romanian and German Sample, and Can It Explain Different Privacy-Related Behaviors?

Abstract

In a world of rapidly developing technologies and constant novel applications, people tend to spend more time online, sharing details from their private lives. However, previous studies found that much of the literature addresses information breaches, and not necessarily boundary protection in online environments. For this reason, several authors raised awareness of the importance of social privacy in todays' technological era (Knijnenburg et al., 2022). Social privacy, as explained by Burgoon (1982), is an elementary characteristic of privacy, which allows an individual to withdraw from social interactions, control undesirable conversations, and balance personal boundaries. Thus, the first aim of this paper is to continue previous research on the topic of privacy as a value (Markink, 2024). Specifically, this research investigates whether social privacy as a value is a distinct construct from the other two privacy values, observational and informational privacy, within a sample of Romanian and German respondents. As values influence perceptions, emotions, and behaviors (Schwartz et al., 2017b), the second goal of this study is to investigate the relation between social privacy as a value and three different privacy behaviors. Three hypotheses were designed, each focusing on one behavior, namely: 1) asking other people for help in solving personal matters, 2) choosing who to spend time with, and 3) limiting interactions with others at social events. An exploratory factor analysis showed that social privacy as a value is a distinct construct from the other two privacy values. However, the low internal consistency suggests that the measurement of social privacy as a value requires further refinement. Secondly, a linear model showed that there is a relation between social privacy as a value and privacy behaviors, but these results are not consistent in the Romanian and German subsamples. This study contributes to the measurement of social privacy as a value within Schwartz' recently revised Portrait Value Questionnaire (PVQ-RR) (Schwartz & Cieciuch, 2021), adding to the topic of privacy as a value.

Introduction

In a world of rapidly developing technologies and constant novel applications, people tend to spend more time online, sharing details from their private lives. These actions raise privacy concerns, as individuals are not always fully aware of how their data is managed. Given that people communicate increasingly via social media applications, privacy needs to be addressed from new perspectives to ensure protection (Knijnenburg et al., 2022). Although "privacy" is a well-known concept, it has hardly been integrated into a general definition. Many scholars attempted to define this term, but it seems that "privacy" is understood differently between cultures, societies, and individuals (Lukács, 2016), and perceptions of privacy vary greatly.

Not only is privacy hardly defined and understood differently among individuals, but it can also be perceived as a value. A previous study by Markink (2024) investigated the addition of three privacy dimensions as values, namely informational, observational, and social, within the basichuman values questionnaire by Schwartz & Cieciuch (2021). The findings suggest that these are different constructs within the questionnaire, and privacy can be indeed perceived as a universal human value. However, as multiple studies focused on investigating informational privacy, several authors raise awareness of the importance of social privacy in todays' technological era (Knijnenburg et al., 2022). Social privacy, as explained by Burgoon (1982), is an elementary characteristic of privacy, which allows an individual to withdraw from social interactions, control undesirable conversations, and balance personal boundaries. This dimension helps individuals maintain privacy in their social environment. A more recent study by Knijnenburg et al. (2022) proposed that privacy should now be considered as a form of boundary regulation, as individuals communicate online frequently. Despite its importance, social privacy has not been studied empirically in multiple countries, and its validity is not yet assessed. Consequently, the present research aims to investigate whether social privacy as a value can be assessed reliably within a sample of Romanian and German respondents, as a follow up of Markink's (2024) research paper.

Moreover, previous research showed that values influence perceptions, emotions, and behaviors (Schwartz et al., 2017b). Curiously, people value their privacy, but they are willing to disclose themselves or private information to other people or online (Westin, 1967). This behavior might be motivated by diverse needs, yet some individuals are still willing to put at risk their social privacy (Knijnenburg et al., 2022). Given that, the second aim of this paper is to investigate whether

social privacy as a value is predictive of privacy behaviors. The privacy behaviors are designed according to the social privacy scale used by Markink (2024), and Burgoon's (1982) definition of social privacy to balance personal interactions and boundaries. Thus, the behaviors are: 1) asking other people for help, 2) limiting interactions at social events, and 3) carefully choosing who to spend time. However, first it is crucial to define privacy and understand its importance.

Definitions of Privacy

A widely known definition of the term "privacy" is that of Samuel Warren and Louis Brandeis, who explain it as "the right to be left alone" (Warren & Brandeis, 1890, p. 195). However, this definition seems incomplete for the present era, as it does not address phenomena like social media usage or online interpersonal connections. A more comprehensive definition of privacy is the one created by Margulis (1977): "selective control over transactions between self (or one's group) and others, the ultimate aim of which is to enhance autonomy and/or to minimize vulnerability" (p. 10). As opposed to the first one, this definition accentuates that privacy is linked with individual happiness, health, and comfort. Further, Burgoon (1982) listed 11 definitions of privacy and identified six key aspects: 1) privacy can be understood from an individual or group perspective, 2) privacy needs are distinct among people, and take different forms, 3) there is a difference between how privacy is attained and the desired objective, 4) while some see privacy as a legal right, others say it requires action to benefit from it, 5) privacy includes personal control over interactions with others, and 6) there are multiple sub-dimensions of privacy. Given the increased use of social media in the past years, a more recent study by Knijnenburg et al. (2022) proposed that privacy could be seen as a form of 'interpersonal boundary regulation' (p. 113). Although these complex attributes of privacy cannot be integrated into an universal definition, the features underline conditions, and motivations behind one's privacy needs. Thus, the multifaceted nature of privacy can be acknowledged.

Privacy Theories

In addition to these key characteristics, several theories about privacy have helped to explore this topic more in-depth. For example, the "privacy paradox" (Westin, 1967) highlights an unusual phenomenon: while people are worried about how their data is treated, they willingly share private information. This action is motivated by different human necessities, such as seeking

attention (Kokolakis, 2017) or achieving various emotional needs (Berger & Milkman, 2012). Another study suggested that self-disclosure is motivated by social connectedness, support, authenticity, and capitalization needs, indicating that social media platforms help individuals achieve these aims (Luo & Hancock, 2020). This underlines the complex nature of privacy motivations, indicating that other human needs might be more important than their privacy. Another theory is that of Westin (1967), who explains that individuals determine their privacy level instinctively, balancing between too much or little privacy according to their necessity. This perspective highlights four functions of privacy: 1) it improves self-reflection, 2) it releases emotional tension, 3) it limits and protects social communication, and 4) it influences decisionmaking (Westin, 1967). This theory shows the importance of privacy for an individual's overall well-being. Another influential theory is that of Altman (1975), who considered privacy as a process by which people selectively choose whom to share private details with. As opposed to the previous two theories, this one is more focused on social privacy. Three key aspects of privacy emerged from this theory, specifically that privacy influences communication, privacy is different between cultures, and it has psychological implications (Altman, 1975). Overall, these theories integrate different, but relevant, aspects of privacy, showing how attitudes or behaviors are shaped. Moreover, these prove the difficulty of defining this concept into a single proposition.

Privacy as a Value

As discussed previously, "privacy" plays a significant role in people's lives, as it is linked with behavioral decision-making and emotions. Accordingly, it can be viewed as a value since it is internationally recognized as a legal right by institutions like the European Court of Human Rights (Lukács, 2016). A previous study by Schwartz (2012) shows that human values are beliefs which people hold on long-term, explaining the impact these have on emotions, justifications, attitudes, and motivating behavior. While initially Schwartz's value theory analyzed 10 values, the scale was later extended to 19 universal values, to enlarge the predictive power and assure a universal scale for different cultures. The scale includes values such as self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism (Schwartz, 2012). By arranging them in a circular scheme, the values that are close to each other present a congruent relation, while the opposing ones present an incompatible relation (Schwartz, 2012). Schwartz et al., (2017) found that all values can be distinguished by respondents from Italy,

Poland, Russia, and the USA. Subsequent research in 49 cultures and 32 languages revealed the utility of the recently revised Portrait Value Questionnaire (PVQ-RR) as a tool to estimate value-ranking and correlations across various cultures (Schwartz & Cieciuch, 2021). The validation of this scale across multiple cultures was crucial in understanding human values, and how these influence decisions. However, these studies did not include privacy as a value within the PVQ-RR.

Given the multifaceted nature of privacy, especially in todays' era, several authors have tried to address this gap by including privacy in the values scale. As an example, a study by Huijts & Haans (2023) tested whether the addition of privacy as a value within the PVQ-RR can explain emotions in the context of digital risks. In a sample of UK respondents, it was found that privacy can be distinguished from the other 19 values and that it gives valuable insight into the consumer decision-making process. However, the study focused only on testing the effect of information privacy as a value. As discussed by Burgoon (1982), one characteristic of privacy is that it has four dimensions: physical, psychological, informational, and social. The first one refers to physical unavailability to others, while the second one concerns the capacity to manage incoming and outgoing affective and cognitive information. Informational privacy refers to the right of people to control the private data they share, while social privacy refers to regulating social interactions and relationships. A recent study by Markink (2024) has included privacy as a value in the PVQ-RR, by introducing four different dimensions: information privacy (being able to control the shared data), social privacy (being able to control social interactions), observational privacy (being seen by others in physical or non-physical environments), and solitude (referring to being alone and being seen by others). Due to the high correlation and item similarity of "solitude" and "social privacy", these two dimensions were collapsed into one, namely "social privacy". The results show that the three privacy dimensions as values (informational, observational, and social) can be distinguished and assessed reliably as a sub-scale within the PVQ-RR (Markink, 2023).

The Current Study

The first aim of the present paper is to test whether the dimension of "social privacy" as a value can be assessed reliably in a new sample, and whether this value is distinct from the other two privacy values. According to Valkengoed et al. (2021), a scale is valid once it was examined in multiple different populations, yielding consistent and reliable results. This is also in line with a recommendation of Markink (2024) and a limitation mentioned by Huijts & Haans (2023), who

highlighted the need to test the privacy scale within a new culture to confirm it is reliable. Additionally, Da Rocha Morgado et al. (2017) note that one limitation mentioned by many studies is the generalizability of the scale and the need for sample diversification. The study of Markink (2024) was conducted on a sample of UK respondents, and the present study focuses on Romanian and German respondents.

Previous research found substantial differences in privacy perceptions between these countries. Specifically about privacy and data protection topics, a study by Custers et al. (2018) found multiple distinctions between Romania, Germany and the UK: 1) the media in Romania is barely attentive to privacy and data protection matters, whereas in the UK and Germany there is an increasing and strong awareness of these matters from the media, 2) the level of concern people have about their data is relatively low in Romania, medium in Germany, and quite high in the UK, 3) whereas in the UK people feel they have control over their private data, in Romania and Germany this feeling is rather low (Custers et al., 2018). This analysis shows that there three cultures perceive privacy differently, but it also seems like the general level of interest in this topic is distinct.

In terms of social privacy specifically, discrepancies might arise when analyzing Hofstede's cultural dimensions (Hofstede, 1984). On one hand, Romania is a more collectivistic culture (Meeuwesen et al., 2009b), meaning that abiding to the group norms is important, which might interfere with individual social privacy. On the contrary, Germany and UK are more individualistic countries (Meeuwesen et al., 2009b), where individuals and family might be more socially private. Romania is a country with Eastern influences, while Germany is a country with Western influences, which might also be a reason for more opposing values in terms of privacy. Given these differences, the present study covers a research gap by exploring the first research question: "Can social privacy as a value, as measured by Markink (2024), be assessed reliably within a new sample?".

As explained previously, values hold the assumption that they can explain, influence, and predict behavior (Schwartz et al., 2017b). However, multiple studies showed that even when people value their privacy, they are still willing to breach their privacy (Knijnenburg et al., 2022; Luo & Hancock, 2020). Thus, a second aim of this research is to investigate if social privacy is predictive of specific privacy-related behaviors. To examine this, a second research question was formulated: "Is social privacy as a value predictive of privacy-related behaviors?". Three hypotheses were

designed to investigate this relation: 1) Social privacy as a value negatively influences asking other people for help in solving personal matters.; 2) Social privacy as a value positively influences who people choose to spend time with.; 3) Social privacy as a value positively influences limiting interactions with others at social events. Through these hypotheses, not only social privacy as a value will be examined thoroughly, but it will be revealed whether this value is indeed connected to certain actions.

The next section of this paper will explain the different details of the research and how the analysis was be conducted. Following, a discussion will answer the research questions and will put together the concluding ideas of the study.

Methods

Participants and Design

This study utilized a quantitative, cross-sectional design. The respondents were selected through multiple sampling techniques. Students from the University of Twente were selected through volunteer sampling method. Secondly, through a convenience sampling approach, the link was distributed by the researcher among friends and family members. Lastly, through a snowball sampling procedure, the researcher asked all participants to send the link further to other potential respondents. Two requirements for the participants were applied. Firstly, their nationality had to be Romanian or German. Secondly, all participants had to be over 18 years old. The respondents chose the language (Romanian, English, or German) in which they wanted to complete the questionnaire, to ensure a complete understanding of the items.

In total, 266 participants completed the questionnaire. Multiple exclusion criteria were selected for the respondents. Firstly, three participants were excluded because they did not complete the questionnaire. 19 respondents were excluded because they did not pass one or both attention checks. Further, one German and five Romanian participants were deleted because they completed the questionnaire in English, which could lead to a different understanding of the items.

¹ Initially, the study also focused on the Dutch nationality. However, there were only 5 Dutch participants, and they were deleted from the data set since the subsample was too small.

Lastly, one participant was deleted from the data set for not giving their full consent to participate.

All remaining participants gave their consent to participate in the study.

Consequently, the final sample size had 232 respondents, consisting of 165 females (71%) and 67 males (29%). The age ranged from 18 to 88 years, with a mean of 34 and a standard deviation of 14. The detailed statistics for each nationality can be seen in Table 1.

Table 1Descriptive Statistics for Each Nationality

Statistics	German	Romanian
Total Participants	137	95
Total Males	33 (25%)	34 (36%)
Total Females	104 (75%)	61 (64%)
Mean Age	37	31
Standard Deviation for Age	17	12

The students from the University of Twente were rewarded with SONA credit points for their participation. Before beginning the survey, all respondents provided their authorization to take part in the study through the online consent form. The research was approved by the University of Twente Ethics Committee before the beginning of the data collection.

Materials

The present study was conducted in an online environment. Consequently, to obtain the necessary information from the participants, a questionnaire was created on the platform Qualtrics. Initially, the questionnaire was designed in English. The Romanian and German versions of the revised Portrait Values Questionnaire (PVQ-RR) were available online. The remaining sections, which will be explained further, were translated to Romanian and German by the researchers. To ensure clarity of the text, multiple individuals cross-checked the Romanian and German versions with the initial English questionnaire.

Measurements

Social Privacy. Social privacy as a value was measured in line with Markink's (2024) study with the items: 1) "It is important to him/her to control how he/she interacts with others to meet his/her own needs.", 2) "It is important to him/her to have a space that is exclusively his/hers.", 3) "It is important to him/her to be able to control when he/she has interactions with close others.".

In Markink's (2024) study, four different privacy dimensions were initially included: informational privacy, observational privacy, social privacy, and solitude. After their analysis, three items were deleted, resulting in a new social privacy scale with the items that were previously mentioned. In line with the final model of Markink (2024), the three items that were removed from the scale were also measured in the present study, but not used in the analyses. Consequently, the other privacy dimensions analyzed in this research were information privacy (i.e., "It is important to him/her to actively protect his/her online data."), and observational privacy (i.e., "It is important to him/her to communicate with others without being overheard.") (See Appendix I). To be consistent with the format of the PVQ-RR, three items were used for each dimension, formulated in the same manner and with the same response scale. Thus, in total 12 new items were mixed in the values questionnaire (see Appendix II), but 9 were used in the analysis of the present study.

The PVQ-RR included female and male as genders, and after participants chose their preference, they were directed to the questionnaire of that specific gender. For the options "non-binary" and "prefer not to say", one of the gender conditions was randomly assigned. The statements were constructed from a 3rd person perspective, and participants were asked to think how much a fictional character is like themselves. The propositions were related to the importance of various ideas, goals, or desires in life (i.e., "It is important to her to care for nature.", "It is important to him to protect his public image.", "It is important to her to be a dependable and trustworthy friend."). Participants indicated their level of similarity on a six-point response scale: (1) not like me at all, (2), not like me, (3), a little like me, (4) moderately like me, (5) like me, (6) very much like me.

Social Privacy Behaviors. Social privacy behaviors were measured with three items: 1) "I prefer to solve personal matters alone rather than asking people for help.", 2) "I generally choose carefully with whom I spend time.", 3) "I generally try to limit interactions with others at social events.". These items were mixed in with six other items measuring information privacy and observational privacy behaviors (see Appendix III). Participants were asked to express how often

they engage in these various behaviors on a five-point response scale: (1) never, (2) rarely, (3) regularly, (4) often, (5) always/very often. A sixth response option was included, namely "does not apply", which has been coded as a missing value.

Attention Checks. Lastly, two attention checks were added to the PVQ-RR section, to check whether participants were paying attention to the study. The statements were based on the first attention check used by Markink (2024). Therefore, the proposition on positions 9 and 46 in the survey was: "It is important that you pay attention to this study. To indicate that you have read this please tick "Not like me". The respondents that did not pass one or both attention checks were excluded from the study.

Procedure

The link of the questionnaire was firstly directing respondents to a page where they could choose their preferred language. Following, the consent form page opened in the preferred language (Romanian, German, or English). Within this page information about the present study was given, without stating the specific aim, to reduce bias. The consent form gave the participants information about the storage and sharing of their data, confidentiality, and anonymity treatment with regards to their data. It was indicated that their participation is entirely voluntary, and they could withdraw from the study at any time, in which case their responses will not be retained. Contact emails of the researchers were also given, in case they wanted more information about the study. After reading the information, they were asked to either agree or disagree with the terms of the research. When they chose "no", the survey was ending. When they chose "yes", the next section would open, requesting the gender, nationality, and age of respondents (see Appendix IV).

The following page consisted of the PVQ-RR and the privacy as a value items. After completing this part, the next section with the behavioral items opened. After finishing, an end page opened, where participants were thanked for their participation, and the aim was shortly explained. The contact emails were written one more time, in case they needed more information.

Data Analysis

After the data collection period, the questionnaire was transferred into an Excel file. Some participants' responses were deleted before the start of the analysis, based on the exclusion criteria.

The R Studio Programme (version 4.1.2) was used for the analysis. The R codes can be seen in Appendix V.

Further, to obtain an overview of descriptive statistics, the demographic data was explored. Thus, for age, the mean and standard deviation were computed. For gender identification and nationality, the ratio was computed.

In the initial analysis performed by Markink (2024), four privacy dimensions were tested. A confirmatory factor analysis showed that the items of information privacy, observational privacy and solitude measured privacy well. However, not all items of social privacy had acceptable factor loadings (>.50). Additionally, since social privacy and solitude had a very strong correlation, of .94, some items were dropped, resulting in a statistically improved model fit. Given the results, a new social privacy dimension was created, named 'social privacy', consisting of one item of the initial social privacy dimension, and two items of the solitude dimension. The present study analyses social privacy as a value, using the items of the newly created social privacy dimension.

Consequently, to answer the first research question, an exploratory factor analysis (EFA) was performed. The goal was to investigate whether the social privacy as a value is distinct from the other two privacy dimensions. This analysis also showed whether the items of social privacy as a value are distinctive from each other, and whether the items are attributed to a single underlying construct (Fabrigar & Wegener, 2011). The exploratory factor analysis was performed for Romanian and German respondents altogether. This is because the present study had 95 Romanian participants, but a sample of at least 100 participants is considered as acceptable (Gorsuch, 1983). Additionally, according to Comrey and Lee's (2013) criteria, a sample size of at least 200 respondents is seen as reasonable. For exploratory purposes only, the factor loadings for each nationality can be found in Appendix VII, but the results must be interpreted carefully. Lastly, Cronbach's Alpha was also computed to check if the items of social privacy are reliable and internally consistent.

To answer the second research question, and to test the three related hypotheses, a linear regression model was performed. This statistical method tested the effect of social privacy as a value as the independent variable on the three different privacy behaviors as dependent variables. For exploratory purposes, the same model was tested for each nationality.

Results

To answer the first research question, 'Can social privacy as a value, as measured by Markink (2024), be assessed reliably within a new sample?', an exploratory factor analysis with oblique rotation (oblimin) was conducted, using the privacy items from Markink's (2024) study. Firstly, a visual examination was made through a scree plot, which indicated that a 3-factor model is appropriate (Ledesma et al., 2015). Furthermore, the Kaiser-Meyer-Olkin measure indicated the sample is adequate for the analysis (KMO = 0.82), and the Bartlett's test of sphericity specified that the correlations between the variables from the dataset are significantly different ($\chi^2(36)$ = 449.39, p< .001) (Shrestha, 2021). Thus, it was analyzed if information privacy as a value, observational privacy as a value, and social privacy as a value are three distinct constructs. Moreover, Cronbach's Alpha was computed for each factor, and α when an item is dropped was investigated. Table 2 shows the statistics of the analyses.

Table 2
Summary of Exploratory Factor Analysis for the Privacy Values and Cronbach's Alpha Statistics

Values for Each Factor	Factor 1	Factor 2	Factor 3	Commun	α and α if Item Dropped
Factor 1: Information Privacy					.82
inf2: It is important to him/her to be aware of which data are collected about him/her while using the internet.	.79	07	02	.60	.75
inf30: It is important to him/her to control which personal information is collected about him/her.	.76	.02	.02	.59	.74
inf54: It is important to him/her to actively protect his/her online data.	.80	.04	02	.65	.75

Summary of Exploratory Factor Analysis for the Privacy Values and Cronbach's Alpha Statistics

Values for Each Factor	Factor 1	Factor 2	Factor 3	Commun alities	α and α if Item
Factor 2: Observation Privacy					.62
obs16: It is important to him/her that others do not hear what he/she discusses with his/her best friend.	03	.77	05	.56	.51
obs42: It is important to him/her to communicate with others without being overheard.	.03	.42	.17	.27	.42
obs71: It is important to him/her to control who is able to see and hear when he/she interacts with close others.	.14	.39	.28	.37	.71
Factor 3: Social Privacy					.48
sol20: It is important to him/her to be able to control when he/she has interactions with close others.	04	.03	.70	.49	.23
soc34: It is important to him/her to control how he/she interacts with others to meet his/her own needs.	.03	10	.53	.26	.38
sol50: It is important to him/her to have a space that is exclusively his/hers.	.16	.28	.18	.20	.51

Note. The eigenvalues for Factors 1, 2, and 3 were 1.91, 1.09, and 0.98, respectively. The variance explained for Factors 1, 2, and 3 was 0.21, 0.12, and 0.11, respectively.

The factor loadings are acceptable when these are above the cutoff of .50, which means the items measure the construct well (Alexe et al., 2022). As shown in the table, the factor loadings for information privacy as a value items were around .80. Of the items of observational privacy as a value only item 16 had a high factor loading, of approximately 0.8, and the other two items had unacceptable factor loadings of around .40.

For social privacy as a value, item 34 had a factor loading at the cutoff of 0.50, and item 20 had an acceptable factor loading of 0.7. Since item 50 had low factor loading, low communalities, and Cronbach's Alpha would increase if this item was dropped from α =.48 to α =.51, the analysis was performed again without this item. The model has statistically improved overall by eliminating this item. For item 34 the factor loadings increased to 0.65, however for item 20 it decreased to 0.52. Still, the deletion of item 50 from the model resulted in a small increase for some of the other factor loadings of the other two privacy values (i.e., item 42 increased from 0.42 to 0.59.). The factor loadings of the analysis without item 50 can be seen in Appendix VI. The analysis was also performed separately for the Romanian and German data sets. However, as mentioned previously, the sample sizes were small, especially for the Romanian population, which is why the results of the factor analysis per nationality should not be treated as significant. Consequently, Appendix VII presents only the factor loadings for each nationality.

Further, in line with the previous research of Markink (2024), the factor loading of item 34 was around 0.6 to 0.65. The item 20 had a factor loading of approximately 0.66 in Markink's (2024) study, but in the present study the factor loading fell at the acceptable cutoff of .52 after eliminating item 50. This item, 'It is important to him/her to have a space that is exclusively his/hers.' was kept in the model of Markink's (2024) study, falling a bit under the cutoff at 0.46. However, in the present study this item had an unacceptable factor loading of .18, which is why it was eliminated. The model improved overall, however leaving the social privacy dimension as a value with only two items.

Overall, social privacy as a value had poor internal consistency even after deleting item 50 (α = .51). In the study performed by Markink (2024), α was .61, and even though the factor loadings were acceptable, these were lower than of the other two privacy values. Moreover, social privacy as a value had only two items, which suggests that the measurement requires refining. Still, based on the results of the analysis, social privacy as a value can be distinguished from the other two values.

To answer the second research question, "Is social privacy as a value predictive of privacy-related behaviors?", three hypotheses were designed. Specifically, it was assessed whether social privacy influences the three privacy behaviors through a linear model.

Contrary to hypothesis 1, the analysis showed that social privacy as a value significantly positively affects asking other people for help in solving personal matters (β = .22, p= .003). This model showed a statistically significant proportion of variance for this behavior (R^2 = .038, F(1,230)= 9.05, p= .003). Further, in line with hypothesis 2, the analysis showed that social privacy as a value significantly positively influences who people choose to spend time with (β = .27, p< .001). This model showed a statistically significant proportion of variance for the second behavior (R^2 = .05, F(1,230)= 11.74, p< .001). Lastly, in line with hypothesis 3, the results showed that social privacy as a value significantly positively influences limiting interactions with others at social events (β = .19, p= .032). For the last behavior, the model showed a statistically significant proportion of variance (R^2 = .02, F(1, 230)= 4.65, p= .032).

For exploratory purposes the linear model was fitted for each nationality separately. Two results were statistically not significant and the β is very small, which means the effect size was small. Table 3 presents the statistics p and β for each nationality.

Table 3Linear Model Statistics for the Romanian and German Sample

	Romanian S	Sample	German Sample		
Hypotheses	β	p	β	p	
Social privacy as a value negatively influences asking other people for help in solving personal matters.	.39	.002	.09	.319	
Social privacy as a value positively influences who people choose to spend time with.	.33	.004	.21	.035	
Social privacy as a value positively influences limiting interactions with others at social events.	.05	.704	.30	.008	

Note. The results in bold support the hypotheses for each subsample.

Discussion

Social Privacy as a Value

The first aim of this research was to investigate if social privacy as a value can be distinguished from observational privacy as a value and informational privacy as a value. This was analyzed using the privacy scale tested by Markink (2024) in a sample of UK respondents, where the analysis showed that privacy as a value has three dimensions. As discussed in the introduction,

a scale is confirmed to be valid once it is tested in multiple countries (Van Valkengoed et al., 2021). The results of the analysis confirm the initial expectations, that the privacy scale accurately and reliably measures three distinct values in a sample of Romanian and German respondents.

Consequently, in line with Markink's (2024) study, the items of social privacy as a value are distinct from the other two privacy values. The internal consistency of social privacy as a value is lower than of the other two values, informational and observational privacy, which was also the case in Markink's (2024) study. This finding encompasses several implications. Firstly, it confirms previous findings that privacy has three dimensions, suggesting a clear structure for reliably identifying privacy as a value. It is noteworthy that the present paper, along with that of Markink (2024), did not identify a fourth dimension of privacy, as Burgoon (1982) suggested. As discussed in the introduction, Burgoon's (1982) theory of privacy involved four dimensions, which gives privacy more complexity. The present findings might suggest that the conceptualization of privacy can be understood better by using three dimensions, namely informational, observational, and social. However, this disparity could be due to several aspects, such as different study aims or designs, or the development of knowledge about privacy over time. Another implication resulting from this is that privacy might be more effective to utilize when differentiating it as three, rather than four, values. For example, it is easier at the European Union level to design privacy-related interventions or policies by using the three privacy values.

The present research also introduces some differences from Markink's (2024) study. One item of social privacy, namely 'It is important to him/her to have a space that is exclusively his/hers.' had very low factor loadings, which is why it was removed, resulting in a better model overall. However, social privacy has only two items, namely: 'It is important to him/her to control how he/she interacts with others to meet his/her own needs.' and 'It is important to him/her to be able to control when he/she has interactions with close others.', as opposed to the other two privacy values and the PVQ-RR values. The remaining items are somewhat similar, as the focus of both is on controlling interactions with other individuals. As specified by Burgoon (1982), social privacy refers to being able to control someone's personal relations with different individuals. However, this construct might be too narrow, which could affect measuring social privacy as a value properly. This could be problematic, as today people communicate frequently using social media platforms. As the use of social media is increasing, it might be relevant to capture both online and offline

social privacy aspects, to provide individuals with 'meaningful social interactions and connections' (Knijnenburg et al., 2022, p. 113).

Privacy behaviors

The second question explored whether social privacy as a value predicts social privacy behaviors, through three hypotheses. The first hypothesis was rejected, and the other two hypotheses confirm that this value influences privacy behaviors.

There could be multiple reasons for rejecting the first hypothesis, "Social privacy as a value negatively influences asking other people for help in solving personal matters.". However, a relevant explanation might be that valuing social privacy is not the only variable influencing this behavior. As explained in the introduction of this paper, the privacy paradox theory (Westin, 1967) describes that even though individuals value their privacy, they are willingly sharing private information with others. This behavior can be explained by different internal needs, such as social connectedness or support (Luo & Hancock, 2020). Hence, the privacy paradox might account for the cases in which social privacy as a value does not significantly influence a privacy behavior. However, several studies found that interactions on social media might result in oversharing, thus harming overall psychological well-being of both adults and adolescents (Chu et al., 2023; Kamila et al., 2023). This might emphasize the relevance of social privacy as a value, and the present study found that this value significantly influences behaviors. The other two hypotheses, "Social privacy as a value positively influences who people choose to spend time with." and "Social privacy as a value positively influences limiting interactions with others at social events." are accepted. This finding can help in building policies or market studies that focus on influencing behavior, making sure that social privacy as a value is used properly and ethically. A recent study by Huijts & Haans (2023) tested the effect of *information* privacy as a value in the context of digital risks, confirming that the value influences consumer decision-making process. The present study shows that social privacy as a value also influences behavior, which might be help with developing educational strategies that teach individuals how to behave to protect their social privacy in specific settings, such as schools or workplace.

The present study also confirms that, as discussed in the introduction, privacy values are culturally dependent. The linear model was fitted separately for Romanians and Germans, and the

results were distinct. For the first sample, the third hypothesis was rejected, which means that valuing social privacy does not mean someone will limit interactions with others at social events. This behavior might also be explained by other factors, for instance the more collectivistic nature of the Romanian culture (Meeuwesen et al., 2009b), or situational contexts. On the contrary, for the German sample the first hypothesis was rejected, which means valuing social privacy does not significantly affect seeking help in solving personal matters. While Germany is a more individualistic culture (Meeuwesen et al., 2009b), this behavior might be explained by different factors, such as the type of personal matters, or individual approaches to solving a private matter. This finding can help with strengthening previous theoretical frameworks, such as Hofstede's (1984) cultural dimensions theory, where there is emphasis on the relation between values and behaviors. This can help governments and organizations design strategies that protect the citizens' value of social privacy through appropriate behaviors, as these need to be adapted to a specific culture.

Limitations

The present study has three main limitations that are worth noting. Firstly, there are measurement inconsistencies for social privacy as a value. Two similar items of social privacy might not fully cover all facets of this dimension, as noted previously. The present study shows that social privacy is distinct from the other two privacy values, but it might lack full comprehension of this concept. A second limitation of this study is that it is hard to account for all influencing variables that might affect how social privacy as a value is perceived. For example, previous experiences with privacy breach or technology development might affect how this value is understood. A third limitation of this study is the cross-sectional design, which only captures the data at a single point in time. Thus, it is not clear how social privacy as a value changed for an individual over the years, or how it will change in the future. Given that, the behaviors are also only examined in a particular point in time, rather than understanding if these are fluctuating or not.

Recommendations for Future Research

This research investigated a new sample of Romanian and German participants, as a followup of Markink (2024), which investigated privacy as a value in a sample of UK respondents. Given that these three countries are within the European space, future research could assess the validity of the three privacy dimensions as values in a different continent, such as Asia or Africa. The relation between social privacy as a value and the three social privacy behaviors could be tested again by examining whether there are other moderating variables, such as gender or education level. Future research could also implement educational campaigns or strategies that inform people about social privacy as a value and actions they can take to protect their privacy. As the number of individuals using social media platforms to interact with other people is increasing, privacy concerns extend now to personal communications, rather than solely on informational privacy (Knijnenburg et al., 2022).

Conclusion

The first aim of this paper was to assess whether social privacy as a value is distinct from the other privacy values in a sample of Romanian and German respondents. The exploratory factor analysis showed that these constructs are different from each other, supporting the initial expectations. However, the measurement of social privacy as a value requires further refinement. The second aim of this paper was to investigate whether social privacy behaviors are related to social privacy as a value. A linear model showed that there is a relation between social privacy as a value and the three distinct social privacy behaviors. This model was not consistent within the Romanian and German subsamples. Nonetheless, this might be linked to the cultural differences of these two countries. Thus, this research added to the understanding of social privacy, and it showed it can be interpreted as a value and influence behaviors. This is valuable for the broader knowledge, as privacy is an important topic for today's modern world, and the findings of the present paper could be used for future interventions, research, or educational initiatives. As cultures are different, governments might need different approaches to protect the citizens and create awareness about potential privacy problems.

Reference list

- Alexe, C. I., Alexe, D. I., Mareş, G., Tohănean, D. I., Turcu, I., & Burgueño, R. (2022). Validity and reliability evidence for the Behavioral Regulation in Sport Questionnaire with Romanian professional athletes. *PeerJ*, *10*, e12803. https://doi.org/10.7717/peerj.12803
- Altman, I. (1975). The environment and social behavior: privacy, personal space, territory, and crowding. Brooks/Cole Publishing Company
- Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192–205. https://doi.org/10.1509/jmr.10.0353
- Burgoon, J. K. (1982). Privacy and communication. *Annals of the International Communication Association*, 6(1), 206–249. https://doi.org/10.1080/23808985.1982.11678499
- Chu, T. H., Sun, M., & Crystal Jiang, L. (2023). Self-disclosure in social media and psychological well-being: A meta-analysis. Journal of Social and Personal Relationships, 40(2), 576-599. https://doi.org/10.1177/02654075221119429
- Comrey, A.L., & Lee, H.B. (1992). A First Course in Factor Analysis (2nd ed.). *Psychology Press*. https://doi.org/10.4324/9781315827506
- Cooperman, A. W., & Waller, N. G. (2022). Heywood you go away! Examining causes, effects, and treatments for Heywood cases in exploratory factor analysis. *Psychological Methods*, 27(2), 156–176. https://doi.org/10.1037/met0000384
- Custers, B., Dechesne, F., Sears, A., Tani, T., & Van Der Hof, S. (2018). A comparison of data protection legislation and policies across the EU. *Computer Law & Security Review*, *34*(2), 234–243. https://doi.org/10.1016/j.clsr.2017.09.001
- Da Rocha Morgado, F. F., Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., & Ferreira, M. E. C. (2017). Scale development: ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexão E Crítica*, *30*(1). https://doi.org/10.1186/s41155-016-0057-1
- Fabrigar, L. R., & Wegener, D. T. (2011). Exploratory factor analysis. Oxford University Press.
- Gorsuch, R. (1983). Factor Analysis. Hillsdale, NJ: L. Erlbaum Associates.
- Hofstede, G. (1984). Culture's consequences: International differences in work-related values (Vol. 5). *Sage*.

- Huijts, N.M.A. & Haans, A. (2023). Values as causes of emotions and acceptability in the digital risk context: an extension of the values scale with privacy. *Manuscript in preparation*.
- Jansen, L. E. (2023). Privacy as a Value: Exploring the Integration of Privacy into Schwartz's Value Theory [Master's Thesis]. *Eindhoven University of Technology*.
- Kamila, A. K. F., Hudaniah, M., & Widyasari, D. C. (2023). The effect of self-disclosure in social media on psychological well-being in adolescents during the Covid-19 pandemic. In *Routledge eBooks* (pp. 49–55). https://doi.org/10.1201/9781003402381-7
- Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers & Security*, 64, 122–134. https://doi.org/10.1016/j.cose.2015.07.002
- Ledesma, R. D., Valero-Mora, P., & Macbeth, G. (2015). The Scree Test and the Number of Factors: a Dynamic Graphics Approach. *The Spanish Journal of Psychology*, *18*, *E11*. doi:org/10.1017/sjp.2015.13
- Lukács, A. (2016). What is privacy? The history and definition of privacy. https://publicatio.bibl.u-szeged.hu/10794/7/3188699.pdf
- Luo, M., & Hancock, J. T. (2020). Self-disclosure and social media: motivations, mechanisms and psychological well-being. *Current opinion in psychology*, *31*, 110-115.
- Margulis, S. T. (1977). Conceptions of privacy: Current status and next steps. Journal of Social Issues, 33(3), 5–21
- Markink, T. (2024). Privacy as a Value: Understanding conflicting values in the privacy paradox by using privacy as a distinctive value within Schwartz's value theory [Master's Thesis]. *Manuscript in preparation*.
- Marsh, H. W., Balla, J., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, *103*(3), 391–410. https://doi.org/10.1037/0033-2909.103.3.391
- Meeuwesen, L., Van Den Brink-Muinen, A., & Hofstede, G. (2009b). Can dimensions of national culture predict cross-national differences in medical communication? *Patient Education and Counseling*, 75(1), 58–66. https://doi.org/10.1016/j.pec.2008.09.015
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4–11. https://doi.org/10.12691/ajams-9-1-2

- Schwartz, S. H. (2012). An overview of the Schwartz Theory of basic values. *Online Readings in Psychology and Culture*, 2(1). https://doi.org/10.9707/2307-0919.1116
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Torres, C., Dirilen-Gümüş, Ö., & Butenko, T. (2017). Value tradeoffs propel and inhibit behavior: Validating the 19 refined values in four countries. *European Journal of Social Psychology*, 47(3), 241–258. https://doi.org/10.1002/ejsp.2228
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Torres, C., Dirilen-Gümüş, Ö., & Butenko, T. (2017b). Value tradeoffs propel and inhibit behavior: Validating the 19 refined values in four countries. *European Journal of Social Psychology*, 47(3), 241–258. https://doi.org/10.1002/ejsp.2228
- Schwartz, S. H., & Cieciuch, J. (2021). Measuring the refined theory of individual values in 49 cultural groups: Psychometrics of the Revised Portrait Value Questionnaire. *Assessment*, 29(5), 1005–1019. https://doi.org/10.1177/1073191121998760
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach"s alpha. *International Journal of Medical Education*, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd
- Van Valkengoed, A. M., Steg, L., & Perlaviciute, G. (2021). Development and validation of a climate change perceptions scale. *Journal of Environmental Psychology*, 76, 101652. https://doi.org/10.1016/j.jenvp.2021.101652
- Warren, S. D., & Brandeis, L. D. (1890). The right to privacy. Harvard Law Review, 4(5), 193–220. https://doi.org/10.2307/1321160
- Westin, A.F. (1967). Privacy and Freedom. Ig Publishing

Appendix I

Privacy Items – English Version

Informational Privacy	Observational Privacy	Social Privacy	Solitude
•	discusses with his/her	It is important to him/her to regulate the manner in which he/she interacts with others.	It is important to him/her to decide when to be by himself/herself without any social interaction.
It is important to him/her to control which personal information is collected about him/her.	It is important to him/her to communicate with others without being overheard.	It is important to him/her to control how he/she interacts with others to meet his/her own needs.	It is important to him/her to have a space that is exclusively his/hers.
It is important to him/her to actively protect his/her online data.		It is important to him/her to control who can be physically close to him/her.	It is important to him/her to be able to control when he/she has interactions with close others.

Privacy Items – Romanian Version

Confidențialitatea Informațiilor	Confidențialitatea Observațională	Confidențialitatea Socială	Singurătate
Este important pentru el/ea sa fie constienti de ce date sunt colectate despre el/ea in timp ce se utilizeaza internetul.	Este important pentru el/ea ca alte persoane sa nu auda ce el/ea discuta cu cel mai bun prieten al lui/ei.	Este important pentru el/ea sa reglementeze modul in care el/ea interactioneaza cu altii. Este important pentru	Este important pentru el/ea să decidă când să fie singur/a, fără nicio interacțiune socială.
Este important pentru el/ea sa controleze ce informatii personale sunt colectate despre el/ea.	Este important pentru el/ea sa comunice cu altii fara sa fie auzit de alte persoane.	el/ea sa controleze modul in care el/ea interactioneza cu ceilalti pentru a-si satisfice propriile nevoi.	Este important pentru el/ea să aibă un spațiu care să fie exclusiv al lui/ei.
Este important pentru el/ea sa proteje in mod activ datele online ale lui/ei.	Este important pentru el/ea sa controleze cine este capabil sa vada si sa auda cand el/ea interactioneaza cu apropiatii.	Este important pentru el/ea sa controleze cine poate fi aproape fizic de el/ea.	Este important pentru el/ea să poată controla când are interacțiuni cu alți apropiați.

Privacy Items – German Version

Informationeller Datenschutz	Beobachtende Privatsphäre	Soziale Privatsphäre	Einsamkeit
Für ihn/sie ist es wichtig zu wissen, welche Daten über ihn/sie bei der Nutzung des Internets erhoben werden.	Ihm/ihr ist es wichtig, dass andere nicht hören, was er/sie mit seiner/ihrer besten Freundin/seinem besten Freund bespricht.	Ihm/ihr ist es wichtig, die Art und Weise seines/ihres Umgangs mit anderen zu regeln.	Für ihn/sie ist es wichtig, selbst zu entscheiden, wann er/sie allein sein möchte, ohne soziale Interaktion.
Ihm/ihr ist es wichtig, die Kontrolle darüber zu haben, welche persönlichen Daten über ihn/sie gesammelt werden.	Ihm/ihr ist es wichtig, mit anderen zu kommunizieren, ohne belauscht zu werden.	Ihm/ihr ist es wichtig, die Art und Weise, wie er/sie mit anderen interagiert, zu kontrollieren, um seine/ihre eigenen Bedürfnisse zu erfüllen.	Ihm/ihr ist es wichtig, einen Raum zu haben, der ausschließlich ihm/ihr gehört.
Ihm/ihr ist es wichtig, seine/ihre Online- Daten aktiv zu schützen.	Für ihn/sie ist es wichtig, zu kontrollieren, wer sehen und hören kann, wenn er/sie mit nahestehenden Personen interagiert.		Für ihn/sie ist es wichtig, den Umgang mit nahestehenden Personen kontrollieren zu können.

Appendix II

PVQ-RR - English Version

Here we briefly describe different people. Please read each description and think about how much that person is or is not like you. Put a checkmark in one of the boxes to the right of each question to indicate how much the person described is like you.

How much like you is this person?

		Not l	ike				Very	Does
		me	atNot	A	littleModerate	lyLike	much	not
		all	like n	ıe lik	e me like me	me	like m	e apply
1.	It is important to him/her to form his/h views independently.	ners 						
2.	It is important to her to be aware of which d	lata						
	are collected about her while using internet.	the 						
3.	It is important to him/her that his/her cour is secure and stable.	ntry 						
4.	It is important to him/her to have a good time	me."						
5.	It is important to him/her to avoid upsett other people.	ing 						
6.	It is important to him/her that the weak a vulnerable in society be protected.	and 						
7.	It is important to him/her that people do whe says they should.	hat 						
8.	It is important to him/her never to think deserves more than other people.	he 					••	
9.	It is important to him/her to care for nature	e						

		Not l	ike					Very	Does
		me	atNot	A	little	Moderately	Like	much	not
		all	like me	lik	e me	like me	me	like me	apply
10.	It is important that you pay attention to the	his							
	study. To indicate that you have read the	his							
	please tick "Not like me".	••		••					
11.	It is important to him/her that no one should	ıld							
	ever shame him/her.	••					••	••	
12.	It is important to him/her to regulate t	he							
	manner in which he/she interacts with other	rs.	••	••		••	••	••	
13.	It is important to him/her always to look	for							
	different things to do.	••		••					
14.	It is important to him/her to take care of peop	ole							
	he is close to.	••							
15.	It is important to him/her to have the pow	ver							
	that money can bring.			••			••	••	
16.	It is important to him/her that others do n	ot							
	hear what he/she discusses with his/her be	est							
	friend.			••			••	••	
17.	It is very important to him/her to avoid disea	ase							
	and protect his/her health.			••					
18.	It is important to him/her to be tolerant towa	ard							
	all kinds of people and groups.			••				••	
19.	It is important to him/her never to violate ru	les							
	or regulations.		••						
20.	It is important to him/her to be able to cont	rol							
	when he/she has interactions with others.		••						
21.	It is important to him/her to make his/her ov	wn							
	decisions about his/her life.			••					
22.	It is important to him/her to have ambitions	in							
	life.			••			••	••	

1	Not li	ike				Very	Does
I	ne	atNot	A	littleModerately	Like	much	not
8	ıll	like m	e lik	e me like me	me	like me	apply
23. It is important to him/her to mainta traditional values and ways of thinking.	in 						
24. It is important to him/her that people he know have full confidence in him/her.	vs 					••	
25. It is important to him/her to decide when to l by himself/herself without any soci							
interaction.							
26. It is important to him/her to be wealthy.	••						••
27. It is important to him/her to take part activities to defend nature.	in 						
28. It is important to him/her never to anno anyone.	 						
29. It is important to him/her to develop his/h own opinions.	er 						
30. It is important to him/her to control which personal information is collected about							
him/her.							
31. It is important to him/her to protect his/h public image.	er 						
32. It is very important to him/her to help the people dear to him/her.	he 						
33. It is important to him/her to be personally sa and secure.	fe 						
34. It is important to him/her to control ho he/she interacts with others to meet his/h							
own needs.	••						

	Not 1	like				Very	Does
	me	atNot	A lit	tleModerate	elyLike	much	not
	all	like n	ne like n	ne like me	me	like m	e apply
35. It is important to him/her to be a depend and trustworthy friend.	lable 						
36. It is important to him/her to take risks make life exciting.	that 						
37. It is important to him/her to have the pow make people do what he wants.	er to 						
38. It is important to him/her to plan his activities independently.	s/her 						
39. It is important to him/her to follow rules of when no-one is watching.	even 						
40. It is important to him/her to be successful.	very 						
41. It is important to him/her to follow his family's customs or the customs of a relig							
42. It is important to him/her to communicate others without being overheard.	with 						
43. It is important to him/her to listen to understand people who are different finhim/her.							
44. It is important to him/her to have a strong that can defend its citizens.	state 						
45. It is important to him/her to enjoy 1 pleasures.	ife's 						
46. It is important to him/her that every personal the world have equal opportunities in life.							
47. It is important to him/her to be humble.							

		Not l	like					Very	Does
		me	atNot	A	little	Moderately	Like	much	not
		all	like me	lik	e me	like me	me	like me	apply
48.	It is important to him/her to figure things	out							
	him/herself.		••	••		••			
49.	It is important to him/her to honor	the							
	traditional practices of his/her culture.		••			••	••		
50.	It is important to her to have a space that	t is							
	exclusively hers.					••	••	••	
51.	It is important to him/her to be the one v	vho							
	tells others what to do.	••					••	••	
52.	It is important to him/her to obey all the la	ws."							
53	It is important to him/her to have all sorts	s of							
33.	new experiences.								
5/1	It is important to her to actively protect	her							
J -1.	online data.			••					
55	It is important to him/her to own expens	sive							
55.	things that show his/her wealth					••			
56	It is important that you pay attention to	this							
50.	study. To indicate that you have read								
	please tick "Like me".								
57.	It is important to him/her to protect the natu	ıral							
	environment from destruction or pollution.								
58.	It is important to him/her to take advantage								
	every opportunity to have fun.			••					
59.	It is important to her to control who can	be							
	physically close to her.								
60.	It is important to him/her to conc	ern							
	him/herself with every need of his/her d								
	·								
	ones.								

	I	Not li	like					Very	Does
	1	me	atNot	A	little	Moderately	Like	much	not
	8	all	like me	like	e me	like me	me	like me	apply
61.	It is important to him/her that peop	ole							
	recognize what he achieves.		••			••	••		
62.	It is important to him/her never to	be							
	humiliated.	••	••	••					
63.	It is important to him/her that his/her count	ry							
	protect itself against all threats.	••	••				••	••	
64.	It is important to him/her never to make oth	er							
	people angry.	••	••				••	••	
65.	It is important to him/her that everyone	be							
	treated justly, even people he doesn't know.		••				••	••	
66.	It is important to him/her to avoid anythin	ng							
	dangerous.	••	••				••	••	
67.	It is important to him/her to be satisfied wi	ith							
	what he has and not ask for more.	••	••				••	••	
68.	It is important to him/her that all his/h	er							
	friends and family can rely on him/h	er							
	completely.	••		••		••	••		
69.	It is important to him/her to be free to choo	se							
	what he does by him/herself.	••	••				••	••	
70.	It is important to him/her to accept peop	ole							
	even when he disagrees with them.		••	••					
71.	It is important to her to control who is able	to							
	see and hear her when she interacts with clo	se							
	others.		••			••			

ca

PVQ-RR - Romanian Version

Aici vom descrie pe scurt câteva persoane. Vă rugăm să citiți fiecare descriere și să vă gândiți în ce măsură fiecare persoană este sau nu este ca dumneavoastră. Bifați un cerc de lângă fiecare descriere.

Cât de mult seamănă această persoană cu dumneavoastră?

		Deloc caNu		caPuţin caÎntrucâtva			Foarte mult ca		
		mine	mine	mine	ca mine	Ca mir	nemine		
1.	Este important pentru el/ea să își dezvolte punc de vedere în mod independent.	tele 							
2.	Este important pentru el/ea să fie conștientă de date sunt colectate despre el/ea în timp ce utilize internetul.								
3.	Este important pentru el/ea ca ţara lui/ei să sigură și stabilă.	fie 							
4.	Este important pentru el/ea să se distreze.								
5.	Este important pentru el/ea să evite să supere persoane.	alte 							
6.	Este important pentru el/ea ca cei slabi vulnerabili dintr-o societate să fie protejați	și 							
7.	Este important pentru el/ea ca ceilalţi să facă o le spune el/ea că ar trebui să facă.	rice 							
8.	Este important pentru el/ea ca niciodată să nu gândească că merită mai mult decât alte persoar								

						Foarte
	Deloc o	caNu	caPuţin caÎntrucâtva			mult ca
	mine	mine	mine	ca mine	Ca mir	nemine
9. Este important să acordați atenție acestui st Pentru a indica faptul că ați citit acest lucr rugăm să bifați "Nu ca mine".						
10. Este important pentru el/ea să aibă grijă de na	tură. "					
11. Este important pentru el/ea ca nimeni să nu îl/o de rușine vreodată.	facă 					
12. Este important pentru el/ea să reglementeze n în care el/ea interacționează cu alții.	nodul 					
13. Este important pentru el/ea ca întotdeauna să lucruri diferite pe care să le facă.						
14. Este important pentru el/ea să aibă grija persoanele față de care este apropiat/ă.						
15. Este important pentru el/ea să aibă puterea vine odată cu banii.						
16. Este important pentru el/ea ca alte persoane saudă ce el/ea discută cu cel mai bun prieten al l	ui/ei.					
17. Este important pentru el/ea să evite să îmbolnăvească și să își protejeze sănătatea.						
18. Este important pentru el/ea să fie tolerant/ă fa tot soiul de oameni sau grupuri.						
19. Este important pentru el/ea să nu încalce nicio reguli sau reglementări.						
20. Este important pentru el/ea să poată controla are interacțiuni cu alți apropiați.						
21. Este important pentru el/ea să își ia propriile de în ceea ce privește viața sa.	ec1Z11 					
22. Este important pentru el/ea să aibă ambiții în v	viață."					••

ca

	Deloc caNu		caPuţin caÎntrucâtva			mult	ca
	mine	mine	mine	ca mine	Ca mi	nemine	
23. Este important pentru el/ea să mențină valori	le și						
stilurile de gândire tradiționale.		••			••	••	
24. Este important pentru el/ea ca persoanele pe ca	re le						
cunoaște să aibă încredere deplină în el/ea.	••	••	••		••	••	
25. Este important pentru el/ea să decidă când să	í fie						
singur/ă, fără nicio interacțiune socială.		••	••			••	
26. Este important pentru el/ea să fie înstărit/ă.							
27. Este important pentru el/ea să ia parte la activ	ități						
pentru a proteja natura.		••	••				
28. Este important pentru el/ea ca niciodată să	nu						
enerveze pe nimeni.		••	••				
29. Este important pentru el/ea să își formeze prop	riile						
opinii.							
30. Este important pentru el/ea să controleze	ce						
informații personale sunt colectate despre el/ ea	 a.	••	••		••	••	
31. Este important pentru el/ea să își prote	jeze						
imaginea publică.							
32. Este important pentru el/ea să ajute persoanele	care						
îi sunt dragi.	••	••	••		••	••	
33. Este importantă pentru el/ea siguranța și securit	atea						
personală.							
34. Este important pentru el/ea să controleze modu	ıl în						
care el/ea interacționeză cu ceilalți pentru	a-și						
satisfice propriile nevoi.			••	••			
35. Este important pentru el/ea să fie un prieter	n de						
nădejde și în care poți avea încredere.							

						Foart	e
	Deloc	caNu	caPuţin o	caÎntrucâtv	'a	mult	ca
	mine	mine	mine	ca mine	Ca min	emine	
36. Este important pentru el/ea să își asume riscuri	care						
fac ca viața să fie interesantă.							
37. Este important pentru el/ea să aibă puterea de	a îi						ļ
face pe ceilalți să facă ceea ce vrea el/ea.			••				
38. Este important pentru el/ea să își plan	ifice						
independent activitățile.			••				
39. Este important pentru el/ea să urmeze regulile c	chiar						
și atunci când nimeni nu privește.			••				
40. Este important pentru el/ea să aibă mult succes	ss						
41. Este important pentru el/ea să urmeze obicei	urile						
familiei sau obiceiurile unei religii.			••				
42. Este important pentru el/ea să comunice cu alții	fără						
să fie auzit/ă de alte persoane.			••				
43. Este important pentru el/ea să asculte și să înțele	eagă						
persoanele care sunt diferite față de el/ea.	•		••				
44. Este important pentru el/ea ca statul să fie pute	ernic						
și să poată să își apere cetățenii.			••		••		
45. Este important pentru el/ea să savureze plăc	erile						
vieții.	••	••	••		••		
46. Este important să acordați atenție acestui stu	ıdiu.						
Pentru a indica faptul că ați citit acest lucru	ı, vă						
rugăm să bifați "Nu ca mine".	•		••		••		
47. Este important pentru el/ea ca fiecare persoană	í din						
lume să aibă oportunități egale în viață.	••		••		••		
48. Este important pentru el/ea să fie umil/ă.							

ca

				•		Foart	e
	Deloc		caPuţin caÎntrucâtva			mult	
	mine	mine	mine	ca mine	Ca min	emine	
49. Este important pentru el/ea să își dea se	eama						
singur/ă de lucruri.			••		••		
50. Este important pentru el/ea să aibă un spațiu ca	re să						
fie exclusiv al lui/ei.			••		••		
51. Este important pentru el/ea să respecte prac	ticile						
tradiționale a culturii din care provine.	••	••	••		••	••	
52. Este important pentru el/ea să fie cel/cea ca	re le						
spune celorlalţi ce să facă.		••	••	••		••	
53. Este important pentru el/ea să se supună tu	turor						
legilor.							
54. Este important pentru el/ea să proteje în mod	activ						
datele online ale lui/ei.		••	••	••		••	
55. Este important pentru el/ea să aibă tot soiu	ıl de						
experiențe noi.							
56. Este important pentru el/ea să dețină lucruri scu	ımpe						
care îi arată bogăția.							
57. Este important pentru el/ea să protejeze me	ediul						
natural împotriva distrugerii și poluării.		••			••	••	
58. Este important pentru el/ea să profite de fie	ecare						
ocazie pentru a se distra.							
59. Este important pentru el/ea să controleze cine p	oate						
fi aproape fizic de el/ea.		••	••	••		••	
60. Este important pentru el/ea să se dedice fie	cărei						
nevoi a celor ce îi sunt dragi.		••	••	••		••	
61. Este important pentru el/ea ca oameni:	i să						
recunoască realizările sale.							
62. Este important pentru el/ea să nu fie um	ilit/ă						
niciodată.			••		••		

ca

						Foart	e
	Deloc	caNu	caPuţin	caÎntrucâtv	⁄a	mult	ca
	mine	mine	mine	ca mine	Ca min	emine	
63. Este important pentru el/ea ca țara lui/ei s protejeze împotriva tuturor amenințărilor.	să se 						
64. Este important pentru el/ea ca niciodata si înfurieze alte persoane.	ă nu 						
65. Este important pentru el/ea ca toată lumea s tratată just, chiar și persoanele pe care n cunoaște.							
66. Este important pentru el/ea să evite orice periculos.	este						
67. Este important pentru el/ea să fie satisfăcut/ceea ce are și să nu ceară mai mult.	⁄ă cu 						
68. Este important pentru el/ea ca toți prietenii l familia lui să se poată baza complet pe el/ea.	lui și 						
69. Este important pentru el/ea să fie liber/ă să al singur/ă ceea ce face.	leagă 						
70. Este important pentru el/ea să accepte alte pers chiar și atunci că nu este de acord cu el/ea.	soane 						
71. Este important pentru el/ea să controleze cine capabil să vadă și să audă când el/ea interacțion							
cu apropiații.							

PVQ-RR - German Version

Im Folgenden beschreiben wir Ihnen kurz verschiedene Personen. Bitte lesen Sie jede Beschreibung durch und denken Sie darüber nach, inwieweit Ihnen die Person ähnlich oder nicht ähnlich ist. Bitte kreuzen Sie rechts an, wie ähnlich Ihnen die beschriebene Person ist.

ist mir überhauptist mir ein ist mir ist mir ist mir wenig einigermaßen ist mirsehr nicht nicht ähnlich ähnlich ähnlich ähnlich ähnlich 1. Es ist ihm wichtig, seine eigene Sichtweise" unabhängig von den Meinungen anderer zu entwickeln. 2. Es ist für sie wichtig zu wissen, welche" Daten über sie bei der Nutzung des Internets gesammelt werden. 3. Es ist ihm wichtig, dass in seinem Land" Sicherheit und Stabilität herrschen. 4. Es ist ihm wichtig, Spaß zu haben. 5. Es ist ihm wichtig, es zu vermeiden, andere" Menschen beunruhigen zu oder bekümmern.

ist mir

		iiharhauntiet mir		nur eir			ist miı
		nicht	nicht	wenig	einigermaßen ist		nirsehr
		ähnlich	ähnlich	ähnlich	ähnlich	ähnlic	h ähnlich
6.	Es ist ihm wichtig, dass die Schwachen und Benachteiligten in der Gesellschaft geschütz werden.						
7.	Es ist ihm wichtig, dass die Menschen das tun, was er ihnen sagt.	 S					
8.	Es ist ihm wichtig, nie zu denken, dass er mehr Ansehen oder Anerkennung als andere verdient.						
9.	Es ist ihm wichtig, sich um die Natur zu kümmern.	1					
10.	Es ist wichtig das du dieser Studie Aufmerksamkeit schenkst. Um zu zeigen das du diese Frage gelesen hast bitte wähle Antwort "ist mir nicht ähnlich"	S					
11.	Es ist ihm wichtig, niemals von irgendeiner Person beschämt zu werden.	r					
12.	Es ist ihr wichtig, die Art und Weise, wie sie mit anderen umgeht, zu regeln.	e					

ist mir

überhauptist mir

mir

ist

	überhauptist mir				ist mii	
	nicht	nicht	wenig	einigermaße	en ist m	irsehr
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich	n ähnlich
13. Es ist ihm wichtig, stets nach	a''					
13. Es ist ihm wichtig, stets nach unterschiedlichen Dingen Ausschau zu halten, die er tun kann.						
14. Es ist ihm wichtig, sich um Menschen zu kümmern, die ihm persönlich nahestehen.	1"					
15. Es ist ihm wichtig, die Macht zu haben, die Geld mit sich bringt.	e"					
16. Es ist ihr wichtig, dass andere nicht hören was sie mit ihrem besten Freund bespricht	.,					
17. Es ist ihm sehr wichtig, Krankheiten zu vermeiden und seine Gesundheit zu schützen.						
18. Es ist ihm wichtig, tolerant gegenüber vieler verschiedenen Menschen und gesellschaftlichen Gruppen zu sein.	_					
19. Es ist ihm wichtig, nie Regeln oder Vorschriften zu verletzen.	r"					

ist mir

	iiharhauntiet mir		nur ei r			ist mir
	nicht	nicht	wenig	einigermaß	Ben ist n	nirsehr
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlie	ch ähnlich
20. Es ist wichtig für sie, dass sie kontrolliere kann, wann sie mit nahestehenden Persone interagiert.						
21. Es ist ihm wichtig, Entscheidungen in Hinblick auf sein Leben selbst zu treffen.	m"					
22. Es ist ihm wichtig, im Leben etwas erreiche zu wollen.	en"					
23. Es ist ihm wichtig, traditionelle Werte un Überzeugungen zu bewahren.	 ad					
24. Es ist ihm wichtig, dass die Menschen, die ekennt, volles Vertrauen in ihn haben.	er"					
25. Es ist wichtig für sie, selbst zu entscheider wann sie ohne soziale Interaktion allein sei möchte.						
26. Es ist ihm wichtig, reich zu sein.						

ist mir

		nir ptist mir nicht ähnlich	wenig	ist mir einigermaß ähnlich	ist n	ist min nirsehr ch ähnlich
27. Es ist ihm wichtig, an Aktivitäten zur Schutz der Natur teilzunehmen.	n					
28. Es ist ihm wichtig, anderen nie lästig z werden.	u''					
29. Es ist ihm wichtig, sich immer eine eigen Meinung zu bilden.	e"					
30. Es ist ihr wichtig zu kontrollieren, welch persönlichen Informationen über si gesammelt werden.						
31. Es ist ihm wichtig, sein Ansehen in de Öffentlichkeit zu wahren.	r"					
32. Es ist ihm sehr wichtig, den Menschen z helfen, die ihm am Herzen liegen.	u''					
33. Es ist ihm wichtig, dass er sicher und geschützt ist.	d					

ist mir überhauptist mir

	nur ein überhauptist mir						
	nicht	nicht	wenig	einigermaße	en ist mi	rsehr	
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich	
34. Es ist ihr wichtig zu kontrollieren, wie sie mi	t''						
anderen interagiert, um ihre eigenen Bedürfnisse zu erfüllen.							
35. Es ist ihm wichtig, ein zuverlässiger und vertrauenswürdiger Freund zu sein.	d''						
36. Es ist ihm wichtig, Risiken einzugehen, die das Leben aufregend machen.	e"						
37. Es ist ihm wichtig, dass er Macht und Einfluss auf das Handeln anderer Menscher hat.							
38. Es ist ihm wichtig, seine Aktivitäter eigenständig zu planen.	n''						
39. Es ist ihm wichtig, sich an Regeln zu halten auch wenn ihn niemand beobachtet.							
40. Es ist ihm wichtig, sehr erfolgreich zu sein.							

ist mir

	iiharhauntiet mir		nur eir			ist miı
	nicht	nicht	wenig	einigermaße	en ist mi	rsehr
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich
41. Es ist ihm wichtig, sich a	n"					
Familientraditionen oder religiöse Brauchtum zu halten.	S					
42. Es ist wichtig für sie, mit anderen zu	n"					
kommunizieren, ohne belauscht zu werden.						
42 F : (1						
43. Es ist ihm wichtig, den Menschen, die ander sind als er, zuzuhören und sie zu verstehen.	S					
44 F :						
44. Es ist ihm wichtig, in einem starken Staat zu leben, der seine Bürger verteidigen kann.	u					
	_••	••				
45. Es ist ihm wichtig, die Freuden des Leben zu genießen.	S					
46 Fo ict ibus swighting does in day Manach out do	··					
46. Es ist ihm wichtig, dass jeder Mensch auf de Welt die gleichen Chancen im Leben hat.	eT					
	••	••				
47. Es ist ihm wichtig, bescheiden zu sein.						
48 Es jet ihm wightig dass or Dingon salbet av	t.					
48. Es ist ihm wichtig, dass er Dingen selbst au den Grund geht und sie versteht.	1					

ist mir

nicht wenig einigermaßen ist mirsehr

ist mir nur ein ist mir überhauptist mir

	ähnlich	ähnlichähnlich ähnlich		ähnlich	ähnlicl	n äl
49. Es ist ihm wichtig, die traditionellen Sitte und Bräuche seiner Kultur zu achten.	en"					••
50. Es ist wichtig für sie, einen Ort zu haben, dausschließlich ihr gehört.	er"					
51. Es ist ihm wichtig, derjenige zu sein, danderen sagt, was sie tun sollen.	er					••
52. Es ist ihm wichtig, alle Gesetze zu befolge	n."					
53. Es ist ihm wichtig, eine Vielzahl von neue Erfahrungen zu machen.	en"					
54. Es ist ihr wichtig, ihre Online-Daten aktiv schützen.	zu"					
55. Es ist ihm wichtig, teure Dinge zu besitze die seinen Reichtum zeigen.	n,"					••

nicht

ist mir

überhauptist mir

mir

ist

	überhauptist mir		oinigormaß	on	ist min	
	nicht	nicht	weing	einigermaß	ist n	nirsehr
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlio	ch ähnlich
56. Es ist wichtig das du dieser Studie Aufmerksamkeit schenkst. Um zu zeigen da du diese Frage gelesen hast bitte wähle Antwort "ist mir ähnlich"	S					
57. Es ist ihm wichtig, die Umwelt vo Zerstörung oder Verschmutzung zu schützen.						
58. Es ist ihm wichtig, jede Gelegenheit zu nutzen, um Spaß zu haben.	1"					
59. Es ist ihr wichtig, zu kontrollieren, wer ih körperlich nah sein kann.	r"					
60. Es ist ihm wichtig, sich um jedes Bedürfnis der Menschen zu kümmern, die ihm an Herzen liegen.						
61. Es ist ihm wichtig, dass die Menschen seine Leistung anerkennen.	e"					
62. Es ist ihm wichtig, nie gedemütigt zu werden.	ı					

ist mir

ist mir überhauptist mir

	überhaup nicht	tist mii nicht	wenig	einigermaß	ist mi	ist mii rsehr
	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich	ähnlich
63. Es ist ihm wichtig, dass sich das Land, in dem er lebt, vor allen Bedrohungen schützt.						
64. Es ist ihm wichtig, dass er nie andere Menschenverärgert.	e"					
65. Es ist ihm wichtig, dass alle Menscher gerecht behandelt werden, selbst die, die e nicht kennt.						
66. Es ist ihm wichtig, alle Gefahren zu vermeiden.	a'''					
67. Es ist ihm wichtig, mit dem zufrieden zu sein, was er hat, und nicht mehr zu verlangen.						
68. Es ist ihm wichtig, dass sich Freunde und Familie voll und ganz auf ihn verlassen können.						
69. Es ist ihm wichtig, dass er die Freiheit hat, zu wählen, was er tut.	u"					

ist mir
ist mir
ist mir
nur ein
überhauptist mir
wenig einigermaßen
nicht nicht wenig einigermaßen
ähnlich ähnlich ähnlich ähnlich

/0	. Es ist ihm wichtig, Menschen zu akzeptieren,			
	selbst wenn er mit ihnen nicht einer Meinung			
	ist.			
71	. Es ist ihr wichtig zu kontrollieren, wer sie"	 	 	••
	sehen und hören kann, wenn sie mit			
	nahestehenden Personen interagiert.			

Appendix III

Privacy Behavioural Items – English Version

Here we briefly describe different behaviors. Please read each description and indicate how often or not often you engage in these behaviours. Put a checkmark in one of the boxes to the right of each question.

How often do you engage in these behaviors?

							Does
						Always/Ver	ynot
		Never	Rarely	Regularly	Often	Often	apply
1.	I generally check and manage the gene	eral					
	location settings of my personal devices (e	e.g.					
	Instagram Maps, Tiktok).	·					
2.	I prefer to solve personal matters alone rath	her					
	than asking people for help.	••	••				••
3.	I generally ensure that I am not observe	ved					
	through the camera of my laptop, for examp	ple					
	by covering up the camera.	••	••				••
4.	I actively select a more restricted setting wh	nen					
	encountering cookies pop-ups (everything	ing					
	besides "Accept all cookies").						
5.	I generally choose carefully with whom	ı I					
	spend time.		••				••
6.	I generally hold private conversations or	nly					
	when no one else can listen to them.						
			••	••	••	••	••
7.	I generally tend to store sensitive person	nal					
	documents (e.g. Important Receipts, Ba	ınk					
	Statements, Medical records) safely so the	hat					
	others cannot access it.	••	••	••			••

	Does
	Always/Verynot
	Never Rarely RegularlyOften Often apply
8.	I generally try to limit interactions with others
	at social events.
9.	I generally ensure that I am not observed while
	undressing or changing, for example by
	closing the curtains.

Privacy Behavioural Items - Romanian Version

Aici descriem pe scurt diferite comportamente. Vă rugăm să citiți fiecare descriere și să indicați cât de des sau nu vă implicați în aceste comportamente. Bifați un cerc din dreapta fiecărei întrebări. Cât de des vă implicați în aceste comportamente?

				Întotdeauna	/
		În mod	De multe	Foarte	Nu se
	NiciodatăRareor	i regulat	ori	des	aplică
1.	În general, verific și gestionez setările generale				
	de locație ale dispozitivelor mele personale (de				
	exemplu, Hărți Instagram, Tiktok).		••		••
2.	În general, prefer să rezolv singur problemele				
	personale în loc să cer ajutor altor persoane.		••	••	••
3.	În general, mă asigur că nu sunt observat prin				
	camera laptopului meu, de exemplu prin				
	acoperirea camerei.				••
4.	În general, selectez în mod activ o setare mai				
	restrânsă atunci când întâlnesc ferestre pop-up				••

Întotdeauna/

		În mod	De multe	Foarte	Nu se
	NiciodatăRareor	i regulat	ori	des	aplică
	cookie (totul în afară de "Accept toate cookie-				
	urile").				
5.	În general, aleg cu grijă cu cine îmi petrec				
	timpul.	••			••
6.	În general, țin conversații private numai atunci				
	când nimeni altcineva nu le poate asculta.		••	••	
7.	În general, am tendința de a stoca în siguranță				
	documentele personale sensibile (de exemplu,				
	Chitanțe importante, Extrase bancare,				
	Înregistrări medicale), astfel încât alții să nu le				
	poată accesa.				
8.	În general, încerc să limitez interacțiunile cu				
	ceilalți la evenimente sociale.				
9.	În general, mă asigur că nu sunt observat în				
	timp ce mă dezbrac sau îmi schimb hainele, de				
	exemplu prin închiderea draperiilor.	••			••

Privacy Behavioural Items – German Version

Hier beschreiben wir kurz verschiedene Verhaltensweisen. Bitte lesen Sie jede Beschreibung und geben Sie an, wie oft oder nicht oft Sie diese Verhaltensweisen zeigen. Setzen Sie ein Häkchen in eines der Kästchen rechts neben jeder Frage.

Wie oft üben Sie diese Verhaltensweisen aus?

							Frage	trifft
						Immer/Seh	rauf	mich
		Nie	Selten	Regelmäßi	gOft	oft	nicht zu	l
1.	Ich überprüfe und verwalte generell/in Regel die allgemei							
	Standorteinstellungen mei							
	persönlichen Geräte (z.B. Instagra Maps, TikTok).	am, 						
2.	Ich löse persönliche Angelegenheit lieber allein, als andere um Hilfe zu bitt							
3.	In der Regel sorge ich dafür, dass ich ni durch die Kamera meines Lapt							
	beobachtet werde, zum Beispiel du verdecken der Kamera.							
4.	Einstellung, wenn ich auf Cookies-P	op-						
	ups stoße (alles außer "Alle Cook akzeptieren").	kies 						
5.	Ich wähle im Allgemeinen sorgfältig a mit wem ich Zeit verbringe.	aus, 						
6.	In der Regel führe ich private Gespränur, wenn niemand anderes sie hö							
	kann.							

	Frage trifft Immer/Sehrauf mich	
	Nie Selten RegelmäßigOft oft nicht zu	
7.	Ich neige im Allgemeinen dazu, sensible	
	persönliche Dokumente (z. B. wichtige	
	Quittungen, Kontoauszüge, medizinische	
	Unterlagen) an einem bestimmten Ort	
	aufzubewahren.	
8.	Im Allgemeinen versuche ich, den	
	Umgang mit Fremden bei	
	gesellschaftlichen Veranstaltungen zu	
	begrenzen.	
9.	In der Regel sorge ich dafür, dass ich beim	
	Ausziehen oder Umziehen nicht	
	beobachtet werde, indem ich zum Beispiel	
	die Vorhänge schließe.	

Appendix IV

Consent Form and Demographics – English Version

Before you begin participating in this study, you are required to read about the procedures and other information you will encounter. At the end of this consent form, you will give your permission for using the collected data for research purposes.

- Purpose of the research
- The aim of this research is to measure how privacy is perceived and how it is connected to various privacy-related behaviours. This study is performed by Miruna Russa, Sophia Hochmann, and Matthias Giesen, students of the University of Twente, under the supervision of Nicole Huijts, who works at the same university.
- Risks of participating
- There are no risks associated with participation in this study. The research was reviewed and approved by the BMS Ethics Committee.
- Procedures for withdrawal from the study
- Your participation in this study is voluntary. In case you feel any discomfort while participating, you can withdraw from the study without giving any reasons and at any point during the participation. Your data will only be registered after reaching the end.
- Duration
- Completing this survey will take approximately 15 minutes.
- Personal Information
- In this study demographic data (gender, age, nationality) and experimental data (responses to the survey), will be collected, analyzed, and stored. The aim is to be able to answer the research questions and to possibly publish it in scientific literature.
- Usage of the data during and after research
- All the data will be treated with confidentiality and anonymously. The data will be locally stored on the computer of the researchers. The data collected in this study might also be of relevance for future research projects
- data will be stored on a private device under the regulations of the general data protection regulation (GDPR)
- Data will be stored for 10 years.

• Contact details of the researcher (or his/her representative)
m.russa@student.utwente.nl (for Romanian participants)
m.j.giesen@student.utwente.nl
s.hochmann@student.utwente.nl
n.m.a.huijts@utwente.nl

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl.

	Please	tick	the
	appropria	ate boxes	
	Yes	No	
I have read and understood the study information and procedures.			
I consent voluntarily to be a participant in this study and understand			
that I can refuse to answer questions and I can withdraw from the			
study at any time, without having to give a reason.			
I understand that information I provide will be used only for research		••	
purposes, and it will be treated with confidentiality and anonymity.			
I give permission for the information and answers that I provide to be			
stored so it can be used for future research and learning.			

What is your gender?

[&]quot; Male

[&]quot; Female

[&]quot; Non-binary / third gender

"Prefer not to say
What is your nationality?
"German
" Dutch
"Romanian
What is your age in years?

Consent Form and Demographics – Romanian Version

Înainte de a începe să participați la acest studiu, vi se cere să citiți despre proceduri și alte informații pe care le veți întâlni. La sfârșitul acestui formular de consimțământ, vă veți acorda permisiunea de a utiliza datele colectate în scopuri de cercetare.

- Scopul cercetării
- Scopul acestei cercetări este de a măsura modul în care este percepută confidențialitatea și felul în care este conectată la diferite comportamente legate de confidențialitate. Acest studiu este realizat de Russa Miruna Elena, studentă la Universitatea Twente, sub supravegherea lui Nicole Huijts, care lucrează la aceeași universitate.
- Riscuri de participare
- Nu există riscuri asociate cu participarea la acest studiu. Cercetarea a fost revizuită și aprobată de Comitetul de etică BMS (Facultatea de Științe Comportamentale, Management și Sociale) a Universității Twente.
- Proceduri de retragere din studiu
- Participarea dumneavoastră la acest studiu este voluntară. În cazul în care simțiți vreun disconfort în timpul participării, vă puteți retrage din studiu fără a oferi niciun motiv și în orice moment în timpul participării. Datele dumneavoastră vor fi înregistrate numai după ce ajungeți la

final.

- Durata
- Completarea acestui sondaj va dura aproximativ 10 până la 15 de minute.
- Informații personale
- În acest studiu vor fi colectate, analizate și stocate datele demografice (sex, vârstă, naționalitate) și experimentale (răspunsuri la sondaj). Scopul este de a putea răspunde la întrebările de cercetare și, eventual, de a-l publica în literatura științifică.
- Utilizarea datelor în timpul și după cercetare
- Se asigură menținerea confidențialității și de-identificarea (anonimizarea) datelor, accesul controlat la date, în special în ceea ce privește arhivarea și reutilizarea datelor, modalitățile de diseminare, arhivarea datelor și eventuala publicare a studiului.
- Toate datele vor fi tratate cu confidentialitate si în mod anonim. Datele vor fi stocate local pe computerul cercetătorilor. Datele colectate în acest studiu ar putea fi, de asemenea, relevante pentru proiectele de cercetare viitoare.
- Datele vor fi stocate pe un dispozitiv privat în conformitate cu reglementările din regulamentul general de protecție a datelor (GDPR). Datele vor fi stocate timp de 10 ani.
- Date de contact ale cercetătorului/ilor (sau ale reprezentantului acestuia)
- m.russa@student.utwente.nl (pentru participanții români)
- m.j.giesen@student.utwente.nl
- s.hochmann@student.utwente.nl
- n.m.a.huijts@utwente.nl

Dacă aveți întrebări despre drepturile dumneavoastră ca participant la cercetare sau doriți să obțineți informații, să puneți întrebări sau să discutați orice nelămurire cu privire la acest studiu cu altcineva decât cercetătorul(ii), vă rugăm să contactați Secretarul Comitetului de Etică/Domeniul Științe Umaniste și Științe Sociale ale Facultății de Comportament, Management și Științe Sociale de la Universitatea din Twente la adresa de email: ethicscommittee-hss@utwente.nl.

	Vă	rugăm	să	bifați
	căsı	ıțele		
	core	espunzăto	oare.	
	Da		Nu	
Am citit și am înțeles informațiile și procedurile de studiu.			••	
Sunt de acord să particip la acest studiu în mod voluntar și înțeleg că	••		••	
pot refuza să răspund la întrebări și mă pot retrage din studiu în orice				
moment, fără a fi nevoie să ofer un motiv.				
Înțeleg că informațiile pe care le furnizez vor fi utilizate numai în	••			
scopuri de cercetare și vor fi tratate în mod confidențial și anonim.				
Dau permisiunea ca informațiile și răspunsurile pe care le ofer să fie	••		••	
arhivate, astfel încât să poată fi utilizate pentru cercetări viitoare.				

C 1	1 1 4 0
Care este sexui	l dumneavoastra?

• •	T /	r	1.
	N/	[ascr	บไปท
	1 V	10501	

Care este naționalitatea dumneavoastră?

Ce vârstă aveți?

[&]quot; Feminin

[&]quot; Neutru / al treilea gen

[&]quot; Prefer să nu menționez

[&]quot; Română

[&]quot; Germană

[&]quot; Olandeză

Consent Form and Demographics – German Version

Einverständniserklärung:

Bevor Sie an dieser Studie teilnehmen, müssen Sie sich mit den Verfahren und Zweck dieser Studie vertraut machen. Am Ende dieser Einwilligungserklärung geben Sie Ihre Zustimmung zur Verwendung der gesammelten Daten für Forschungszwecke ab.

Zweck der Studie:

Das Ziel dieser Studie ist es, zu messen, wie Privatsphäre wahrgenommen wird und was für Verhaltensweisen im Zusammenhang mit Privatsphäre eine wichtige Rolle spielen. Diese Studie wird von Miruna Russa, Sophia Hochmann und Matthias Giesen, Studenten der Universität Twente, unter der Aufsicht von Nicole Huijts, die an derselben Universität arbeitet, durchgeführt. Risiken der Teilnahme:

Mit der Teilnahme an dieser Studie sind keine Risiken verbunden. Die Forschung wurde von der BMS-Ethikkommission geprüft und genehmigt.

Ausstieg aus der Studie:

Ihre Teilnahme an dieser Studie ist freiwillig. Sollten Sie sich während der Teilnahme an der Studie unwohl fühlen, können Sie ohne Grund und zu jedem Zeitpunkt von der Studie zurücktreten. Ihre Daten werden erst nach Beendigung der Studie erfasst.

Dauer:

Das Ausfüllen dieser Umfrage wird etwa 15 Minuten in Anspruch nehmen. Persönliche Daten: In dieser Studie werden demographische Daten (Geschlecht, Alter, Nationalität) und experimentelle Daten (Antworten auf die Umfrage) gesammelt, analysiert und gespeichert. Ziel ist es, die Forschungsfragen beantworten zu können und Ergebnisse möglicherweise in wissenschaftlichen Literatur zu veröffentlichen.

Verwendung der Daten:

Die Verwendung der Daten ist während und nach der Forschung vertraulich und anonymisiert. Alle Daten werden lokal auf dem Computern der Forscher gespeichert gemäß den Bestimmungen der Datenschutz-Grundverordnung (DSGVO). Die in dieser Studie gesammelten Daten werden 10 Jahre lang gespeichert denn sie könnten auch für zukünftige Forschungsprojekte von Bedeutung sein.

Kontaktinformationen des Forschers (oder seines Vertreters):

m.russa@student.utwente.nl

m.j.giesen@student.utwente.nl s.hochmann@student.utwente.nl n.m.a.huijts@utwente.nl

Wenn Sie Fragen zu Ihren Rechten als Studienteilnehmer haben, weitere Informationen suchen oder Bedenken zu dieser Studie mit einer anderen Person als dem/den Forscher(n) besprechen möchten, wenden Sie sich bitte an das Sekretariat der Ethikkommission des Fachbereichs Geistes- und Sozialwissenschaften der Fakultät für Verhaltens-, Management- und Sozialwissenschaften der Universität Twente unter ethicscommittee-hss@utwente.nl

	Bitte kreuzen Sie die entsprechenden Felder an.
	Ja Nein
Ich habe die Informationen und den Ablauf der Studie gelesen und	
verstanden.	
Ich erkläre mich freiwillig bereit, an dieser Studie teilzunehmen und	
verstehe, dass ich die Beantwortung von Fragen verweigern kann und	
jederzeit ohne Angabe von Gründen aus der Studie aussteigen kann.	
Ich habe zur Kenntnis genommen, dass die von mir zur Verfügung	
gestellten Informationen nur zu Forschungszwecken verwendet	
werden und dass meine Daten vertraulich und anonym behandelt	
werden.	
Ich erkläre mich damit einverstanden, dass die Informationen und	
Antworten die ich gebe gespeichert werden, damit sie für künftige	
Forschungs- und Lernzwecke verwendet werden können.	

Was ist dein Geschlecht?

[&]quot; Männlich

[&]quot; Weiblich

"Non Binär / Drittes Geschlecht		
" Ich bevorzuge nicht zu antworten		
Was ist deine Nationalität?		
" Deutsch		
" Niederländisch		
"Rumänisch		
Wie alt bist du in Jahren?		

Appendix V

R Codes

library('ggplot2')
library('dplyr')
library('broom')
library('ggpubr')
library('readr')
library('tidyverse')
library('foreign')
library('readxl')
library('topicmodels')
library('ltm')
library('sjPlot')
library('psych')
library('MASS')
library('dplyr')
install.packages('ggdist')
library('ggdist')
install.packages('report')
library('report')
install.packages('ggpubr')
library('ggpubr')

Privacy2 <- read_csv("Privacy2.csv")
view(Privacy2)

only romanian

PrivacyRO <- Privacy2[Privacy2\$Q1 == 1,]

View(PrivacyRO)

#only german

PrivacyDE <- Privacy2[Privacy2\$Q1 == 2,]

View(PrivacyDE)

#create subsets for female and male - romanian

library(dplyr)

female_ro <- filter(PrivacyRO, Q4...2 == 2)

male_ro <- filter(PrivacyRO, Q4...2 == 1)

#create subsets for female and male - german

female_de <- filter(PrivacyDE, Q30 == 2)

male_de <- filter(PrivacyDE, Q30 == 1)

#Part 1 -> Cronbach's Alpha

#Romanian

```
# A. Per gender
#female
#social privacy
install.packages('psych')
library('psych')
install.packages("tmvnsim")
library('tmvnsim')
#social privacy
social <- female_ro[, c("PVQ RO F_20", "PVQ RO F_34", "PVQ RO F_50")]
cronbach.alpha(social)
#information privacy
information <- female_ro[, c("PVQ RO F_2", "PVQ RO F_30", "PVQ RO F_54")]
cronbach.alpha(information)
#observation privacy
observation <- female_ro[, c("PVQ RO F_16", "PVQ RO F_42", "PVQ RO F_71")]
cronbach.alpha(observation)
#male
```

```
#social privacy
```

```
social <- male_ro[, c("PVQ RO M_20", "PVQ RO M_34", "PVQ RO M_50")] cronbach.alpha(social)
```

#information privacy

information <- male_ro[, c("PVQ RO M_2", "PVQ RO M_30", "PVQ RO M_54")] cronbach.alpha(information)

#observation privacy

observation <- male_ro[, c("PVQ RO M_16", "PVQ RO M_42", "PVQ RO M_71")] cronbach.alpha(observation)

#B. both male and female

#social privacy

Rename the columns for consistency

colnames(male_ro)[which(names(male_ro) == "PVQ RO M_20")] <- "sol20"

colnames(male_ro)[which(names(male_ro) == "PVQ RO M_34")] <- "soc34"

colnames(male_ro)[which(names(male_ro) == "PVQ RO M_50")] <- "sol50"

print(colnames(male_ro))

 $colnames(female_ro)[which(names(female_ro) == "PVQ RO F_20")] <- "sol20" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ \\ colnames(female_ro)[which(names(female_ro) == "PVQ RO F_34")] <- "soc34" \\ colnames(female_ro)[which(names(female_ro) == "PVQ R$

```
colnames(female_ro)[which(names(female_ro) == "PVQ RO F_50")] <- "sol50"
print(colnames(female_ro))
male_ro_soc <- male_ro[, c("sol20", "soc34", "sol50")]
female_ro_soc<- female_ro[, c("sol20", "soc34", "sol50")]
merged_social <- rbind(male_ro_soc, female_ro_soc)</pre>
cronbach.alpha(merged_social)
#information privacy
# Rename the columns for consistency
colnames(male_ro)[which(names(male_ro) == "PVQ RO M_2")] <- "inf2"
colnames(male_ro)[which(names(male_ro) == "PVQ RO M_30")] <- "inf30"
colnames(male_ro)[which(names(male_ro) == "PVQ RO M_54")] <- "inf54"
print(colnames(male ro))
colnames(female_ro)[which(names(female_ro) == "PVQ RO F_2")] <- "inf2"
colnames(female_ro)[which(names(female_ro) == "PVQ RO F_30")] <- "inf30"
colnames(female_ro)[which(names(female_ro) == "PVQ RO F_54")] <- "inf54"
print(colnames(female_ro))
male_ro_inf<- male_ro[, c("inf2","inf30","inf54")]
female_ro_inf <- female_ro[, c("inf2","inf30","inf54")]
merged_information <- rbind(male_ro_inf, female_ro_inf)</pre>
```

cronbach.alpha(merged_information)

```
#observation privacy
```

```
colnames(male_ro)[which(names(male_ro) == "PVQ RO M_16")] <- "obs16"

colnames(male_ro)[which(names(male_ro) == "PVQ RO M_42")] <- "obs42"

colnames(male_ro)[which(names(male_ro) == "PVQ RO M_71")] <- "obs71"

print(colnames(male_ro))
```

colnames(female_ro)[which(names(female_ro) == "PVQ RO F_16")] <- "obs16" colnames(female_ro)[which(names(female_ro) == "PVQ RO F_42")] <- "obs42" colnames(female_ro)[which(names(female_ro) == "PVQ RO F_71")] <- "obs71" print(colnames(female_ro))

male_ro_obs <- male_ro[, c("obs16", "obs42", "obs71")]

female_ro_obs <- female_ro[, c("obs16", "obs42", "obs71")]

merged_observation <- rbind(male_ro_obs, female_ro_obs)

cronbach.alpha(merged_observation)

#German

A. Per gender

#female

library('psych')

```
library('tmvnsim')
#social privacy
social_de <- female_de[, c("Q36_20", "Q36_34", "Q36_50")]
cronbach.alpha(social_de)
#information privacy
information <- female_de[, c("Q36_2", "Q36_30", "Q36_54")]
cronbach.alpha(information)
#observation privacy
observation <- female_de[, c("Q36_16", "Q36_42", "Q36_71")]
cronbach.alpha(observation)
#male
#social privacy
social <- male_de[, c("Q35_20", "Q35_34", "Q35_50")]
cronbach.alpha(social)
#information privacy
information <- male_de[, c("Q35_2", "Q35_30", "Q35_54")]
```

cronbach.alpha(information)

```
#observation privacy
```

```
observation <- male_de[, c("Q35_16", "Q35_42", "Q35_71")] cronbach.alpha(observation)
```

#B. both male and female

#social privacy

Rename the columns for consistency

colnames(male_de)[which(names(male_de) == "Q35_20")] <- "sol20"

colnames(male_de)[which(names(male_de) == "Q35_34")] <- "soc34"

colnames(male_de)[which(names(male_de) == "Q35_50")] <- "sol50"

print(colnames(male_de))

colnames(female_de)[which(names(female_de) == "Q36_20")] <- "sol20"

colnames(female_de)[which(names(female_de) == "Q36_34")] <- "soc34"

colnames(female_de)[which(names(female_de) == "Q36_50")] <- "sol50"

print(colnames(female_de))

male_de_soc <- male_de[, c("sol20", "soc34", "sol50")]

female_de_soc<- female_de[, c("sol20", "soc34", "sol50")]

merged_social_de <- rbind(male_de_soc, female_de_soc)

cronbach.alpha(merged_social_de)

```
#information privacy
```

```
# Rename the columns for consistency
```

```
colnames(male_de)[which(names(male_de) == "Q35_2")] <- "inf2"

colnames(male_de)[which(names(male_de) == "Q35_30")] <- "inf30"

colnames(male_de)[which(names(male_de) == "Q35_54")] <- "inf54"

print(colnames(male_de))
```

 $colnames(female_de)[which(names(female_de) == "Q36_2")] <- "inf2" \\ colnames(female_de)[which(names(female_de) == "Q36_30")] <- "inf30" \\ colnames(female_de)[which(names(female_de) == "Q36_54")] <- "inf54" \\ print(colnames(female_de))$

male_de_inf<- male_de[, c("inf2","inf30","inf54")]

female_de_inf <- female_de[, c("inf2","inf30","inf54")]

merged_information_de <- rbind(male_de_inf, female_de_inf)

cronbach.alpha(merged_information_de)

#0.783

#observation privacy

colnames(male_de)[which(names(male_de) == "Q35_16")] <- "obs16"

colnames(male_de)[which(names(male_de) == "Q35_42")] <- "obs42"

colnames(male_de)[which(names(male_de) == "Q35_71")] <- "obs71"

print(colnames(male_de))

```
colnames(female_de)[which(names(female_de) == "Q36_16")] <- "obs16"

colnames(female_de)[which(names(female_de) == "Q36_42")] <- "obs42"

colnames(female_de)[which(names(female_de) == "Q36_71")] <- "obs71"

print(colnames(female_de))
```

male_de_obs <- male_de[, c("obs16", "obs42", "obs71")]
female_de_obs <- female_de[, c("obs16", "obs42", "obs71")]
merged_observation_de <- rbind(male_de_obs, female_de_obs)</pre>

cronbach.alpha(merged_observation_de)

#Part 2 -> Exploratory Factor Analysis

informationprivacy<- rbind(merged_information, merged_information_de)
observationprivacy<-rbind(merged_observation, merged_observation_de)
socialprivacy<-rbind(merged_social, merged_social_de)
factor<- cbind(informationprivacy, observationprivacy, socialprivacy)

Replace all '7' responses with NA
factor[factor == 7] <- NA
summary(factor)

```
#KMO
KMO(factor)
#Bartlett's test of sphericity
factor_imputed <- apply(factor, 2, function(x) ifelse(is.na(x), mean(x, na.rm = TRUE), x))
cor_matrix <- cor(factor_imputed)</pre>
bartlett_result <- cortest.bartlett(cor_matrix, n = nrow(factor_imputed))</pre>
print(bartlett_result)
#Factor Analysis
scree(factor, pc=FALSE)
parallel <- fa.parallel(factoranalysis, fm = "ml", fa = "fa")
efa_data <- factor[, sapply(factor, is.numeric)]</pre>
library(psych)
install.packages('nFactors')
library(nFactors)
install.packages("GPArotation")
efa_results <- fa(efa_data, nfactors = 3, rotate = "oblimin", use = "pairwise")
```

```
print(efa_results)
fa.diagram(efa_results)
print(efa_results$loadings)
print(efa_results$values)
#compute cronbach's alpha
install.packages("mice")
library(mice)
f1 <- efa_data[, c("inf2", "inf30", "inf54")]
f1_imputed <- mice::complete(mice(f1, method = 'mean'))
cronbach_alpha_result <- psych::alpha(f1_imputed)</pre>
print(cronbach_alpha_result)
f2 <- efa_data[, c("obs16", "obs42", "obs71")]
f2_imputed <- mice::complete(mice(f2, method = 'mean'))
cronbach_alpha_result <- psych::alpha(f2_imputed)</pre>
print(cronbach_alpha_result)
f3 <- efa_data[, c("sol20", "soc34", "sol50")]
f3_imputed <- mice::complete(mice(f3, method = 'mean'))
cronbach_alpha_result <- psych::alpha(f3_imputed)</pre>
print(cronbach_alpha_result)
```

```
#exclude item sol50
```

```
efa_data_updated <- efa_data[, !names(efa_data) %in% "sol50"]
summary(efa_data_updated)
scree(efa_data_updated, pc=FALSE)
efa_updated <- fa(efa_data_updated, nfactors = 3, rotate = "oblimin", use = "pairwise")
print(efa_updated)
fa.diagram(efa_updated)
#Factor analysis RO
factor_ro<- cbind(merged_information, merged_observation, merged_social)</pre>
scree(factor_ro, pc=FALSE)
parallel <- fa.parallel(factor_ro, fm = "ml", fa = "fa")
efa_data_ro <- factor_ro[, sapply(factor, is.numeric)]
efa_results_ro <- fa(efa_data_ro, nfactors = 3, rotate = "oblimin", use = "pairwise")
print(efa_results_ro)
fa.diagram(efa_results_ro)
print(efa_results_ro$loadings)
print(efa_results_ro$values)
```

```
#Factor analysis DE
factor_de<- cbind(merged_information_de, merged_observation_de, merged_social_de)
scree(factor_de, pc=FALSE)
parallel <- fa.parallel(factor_de, fm = "ml", fa = "fa")
efa_data_de <- factor_de[, sapply(factor, is.numeric)]
efa_results_de <- fa(efa_data_de, nfactors = 3, rotate = "oblimin", use = "pairwise")
print(efa_results_de)
fa.diagram(efa_results_de)
print(efa_results_de$loadings)
print(efa_results_de$values)
#Part 3 -> Linear model
# Calculate row means for specified columns
Privacy2$behavior1 <- apply(Privacy2[, c("Beh. Scale RO F_2", "Beh. Scale RO M_2", "Q39_5",
"Q40_5")], 1, mean, na.rm = TRUE)
Privacy2$behavior2 <- apply(Privacy2[, c("Beh. Scale RO F_5","Beh. Scale RO M_5", "Q39_2",
```

 $"Q40_2"$)], 1, mean, na.rm = TRUE)

```
Privacy2$behavior3 <- apply(Privacy2[, c("Beh. Scale RO F_8","Beh. Scale RO M_8", "Q40_8", "Q39_8" )], 1, mean, na.rm = TRUE)
```

Privacy2\$SocialPrivacy <- rowMeans(Privacy2[, c("PVQ RO M_34", "PVQ RO M_20", "PVQ RO M_50", "PVQ RO F_34", "PVQ RO F_20", "PVQ RO F_50", "Q36_20", "Q36_34", "Q36_50", "Q35_20", "Q35_34", "Q35_50")], na.rm = TRUE)

```
model1 <- lm(behavior1 ~ SocialPrivacy, data = Privacy2)
summary(model1)
report(model1)
model2 <- lm(behavior2 ~ SocialPrivacy, data = Privacy2)
summary(model2)
report(model2)
model3 <- lm(behavior3 ~ SocialPrivacy, data = Privacy2)
summary(model3)
report(model3)
```

#Romanian population

Privacy2\$behavior2ro <- apply(Privacy2[, c("Beh. Scale RO F_5","Beh. Scale RO M_5")], 1, mean, na.rm = TRUE)

```
Privacy2$behavior3ro <- apply(Privacy2[, c("Beh. Scale RO F_8","Beh. Scale RO M_8" )], 1, mean, na.rm = TRUE)
```

```
Privacy2$SocialPrivacyro <- rowMeans(Privacy2[, c("PVQ RO M_34", "PVQ RO M_20", "PVQ RO M_50", "PVQ RO F_34", "PVQ RO F_20", "PVQ RO F_50" )], na.rm = TRUE)
```

```
model1ro <- lm(behavior1ro ~ SocialPrivacyro, data = Privacy2)
summary(model1ro)
report(model1ro)
model2ro <- lm(behavior2ro ~ SocialPrivacyro, data = Privacy2)
summary(model2ro)
report(model2ro)
model3ro <- lm(behavior3ro ~ SocialPrivacyro, data = Privacy2)
summary(model3ro)
report(model3ro)
```

#German population

Privacy2\$behavior1de <- apply(Privacy2[, c("Q39_5", "Q40_5")], 1, mean, na.rm = TRUE)

Privacy2\$behavior2de <- apply(Privacy2[, c("Q39_2", "Q40_2")], 1, mean, na.rm = TRUE)

Privacy2\$behavior3de <- apply(Privacy2[, c("Q40_8", "Q39_8")], 1, mean, na.rm = TRUE)

```
Privacy2$SocialPrivacyde <- rowMeans(Privacy2[, c( "Q36_20", "Q36_34", "Q36_50", "Q35_20", "Q35_34", "Q35_50")], na.rm = TRUE)

model1de <- lm(behavior1de ~ SocialPrivacyde, data = Privacy2)

summary(model1de)

report(model1de)

model2de <- lm(behavior2de ~ SocialPrivacyde, data = Privacy2)

summary(model2de)

report(model2de)

model3de <- lm(behavior3de ~ SocialPrivacyde, data = Privacy2)

summary(model3de)
```

report(model3de)

Appendix VI Factor Loadings when Item 50 Dropped

TableFactor Loadings after Deleting Item 50

Values for Each Factor	Factor 1	Factor 2	Factor 3
Factor 1: Information Privacy			
inf2: It is important to him/her to be aware of which data are collected about him/her while using the internet.	.79	06	0
inf30: It is important to him/her to control which personal information is collected about him/her.	.76	.02	.04
inf54: It is important to him/her to actively protect his/her online data.	.79	.05	04
Factor 2: Observation Privacy			
obs16: It is important to him/her that others do not hear what he/she discusses with his/her best friend.	04	.65	08
obs42: It is important to him/her to communicate with others without being overheard.	.02	.59	.05
obs71: It is important to him/her to control who is able to see and hear when he/she interacts with close others.	.12	.48	.18

Factor 3: Social Privacy			
sol20: It is important to him/her to be able to control when he/she has interactions with close others.	02	.19	.52
soc34: It is important to him/her to control how he/she interacts with others to meet his/her own needs.	.01	08	.65

Appendix VII Factor Loadings for the Romanian Population

TableFactor Loadings for the Romanian Population

Values for Each Factor	Factor 1	Factor 2	Factor 3
Factor 1			
obs16: It is important to him/her that others do not hear what he/she discusses with his/her best friend.	.68	04	13
obs71: It is important to him/her to control who is able to see and hear when he/she interacts with close others.	.66	01	.09
sol50: It is important to him/her to have a space that is exclusively his/hers.	.52	.16	.06
obs42: It is important to him/her to communicate with others without being overheard.	.44	06	.10
sol20: It is important to him/her to be able to control when he/she has interactions with close others.	.39	.11	.31
Factor 2			
inf54: It is important to him/her to actively protect his/her online data.	.15	.73	10
inf2: It is important to him/her to be aware of which data are collected about him/her while using the internet.	14	.70	.03

inf30: It is important to him/her to control which personal information is collected about him/her.	03	.67	.09
Factor 3			
soc34: It is important to him/her to control how he/she interacts with others to meet his/her own needs.	0	0	1

Factor Loadings for the German Population

TableFactor Loadings for the German Population

Values for Each Factor	Factor 1	Factor 2	Factor 3
Factor 1			
inf2: It is important to him/her to be aware of which data are collected about him/her while using the internet.	.64	05	.04
inf30: It is important to him/her to control which personal information is collected about him/her.	.76	.04	01
inf54: It is important to him/her to actively protect his/her online data.	.83	06	03
Factor 2			
obs16: It is important to him/her that others do not hear what he/she discusses with his/her best friend.	03	1	01
obs42: It is important to him/her to communicate with others without being overheard.	.32	.33	.27
Factor 3			
sol20: It is important to him/her to be able to control when he/she has interactions with close others.	06	06	.67

soc34: It is important to him/her to control how he/she interacts with others to meet his/her own needs.	10	03	.37
obs71: It is important to him/her to control who is able to see and hear when he/she interacts with close others.	.21	.17	.42
sol50: It is important to him/her to have a space that is exclusively his/hers.	.11	.19	.20