

Rules, Expectations & Security through Privacy-Enhanced Convenient Technologies

The citizens' perspective: Awareness, feelings and acceptance of surveillance and surveillance systems for fighting crime in Germany.

A quantitative study.

Noellie Brockdorff¹, Sandra Appleby-Arnold¹, Christian Hawellek², Andryi Ilyuk³

¹Department of Cognitive Science, University of Malta, Msida, Malta

²Gottfried Wilhelm Leibniz Universität Hannover, Germany

³Georg-August-Universität Göttingen, Germany

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Correspondence about this report should be addressed to

Noellie Brockdorff, Department of Cognitive Science, University of Malta, Msida, MSD2080, Malta
noellie.brockdorff@um.edu.mt

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0. Executive Summary

This document presents the results for Germany within the framework of a larger study undertaken as part of the RESPECT project. Analyses are based on a survey regarding the perceptions, feelings, attitudes and behaviours of citizens towards surveillance for the purpose of fighting crime, carried out amongst a quota sample that is representative of the population in Germany for age and gender (based on Eurostat data of 12/2012). Responses were gathered, predominantly, through an online survey. In some RESPECT partner countries, these online responses were supplemented by a number of questionnaires administered in face to face interviews, in order to fulfil the quota and also reach those citizens who do not use the internet. The questionnaire consisted of 50 questions and was available online in all languages of the European Union between November 2013 and March 2014. The German sample is based on the responses from 250 individuals who indicated Germany as their country of residence.¹

Generally, the data reveal a rather large spread in the German respondents' knowledge of different types of surveillance and surveillance technologies, with CCTV (96%) being the type most respondents have heard of and the surveillance of "suspicious" behaviour (38%) the least known. Most respondents also indicated that they know of a number of reasons for the setting up of surveillance, ranging between 92% for the prosecution of crime and 78% for the control of border-crossings. Most respondents think that surveillance is taking place in the country where they live, but almost half of the respondents felt that they do not know about the economic costs of surveillance.

Surveillance of financial transactions is perceived to be the most useful of the different types of surveillance investigated in this study, followed by CCTV and geolocation surveillance. Surveillance of online social networks and surveillance using databases containing personal information were perceived to be the least useful. The highest mean score² was achieved for surveillance of financial transactions for the purpose of prosecution of crime (3.59) and the lowest for database surveillance for the purpose of reduction of crime (1.94). Generally, surveillance was perceived as being most useful for the prosecution of crime and least useful for the reduction of crime. The results for perceived effectiveness of the different types of surveillance in protecting against crime follow the same pattern of results as for perceived usefulness of the same types of surveillance. However, the different types of surveillance are perceived as less effective in the protection against crime than they are deemed useful for the reduction, detection, and prosecution of crime, and different acceptance levels in different locations point at acceptance of surveillance rather being related to respondents having become accustomed to surveillance in city centres and urban areas.

The presence of surveillance appears to make only a small minority of German respondents feel more secure than insecure (12%); almost half of the respondents feel more insecure when surveillance is present. Regarding the respondents' feelings about personal information gathered through surveillance, respondents feel generally a very strong lack of control over processing of personal information gathered via surveillance, irrespective of whether it has been gathered by government agencies or by private companies. Additionally, there is a visible lack of trust in both private companies and government agencies being able to protect personal information gathered via surveillance, with more mistrust towards private companies than towards government agencies. Consequently,

¹ The overall German sample consists of 600 respondents. However, due to the fact that most responses were collected through an online survey, in some of the age/gender subgroups more responses were collected than were needed to complete the quota. In such cases, the questionnaires to be used were randomly selected from amongst the responses collected for that subgroup.

² On a scale from 1 to 5, with 1=not useful at all, and 5=very useful.

there may not only be a missing link between surveillance and feelings of security, but also perceptions of a substantial lack of data protection in connection with personal information gathered through surveillance.

The majority of respondents feel more unhappy than happy with all the different types of surveillance investigated, and they also feel more unhappy than happy about surveillance taking place without people knowing about it.

Most German respondents also agreed more than disagreed that all types of surveillance investigated have a negative impact on their privacy. The strongest negative impact on privacy was perceived for surveillance using databases containing personal information. Moreover, only very few respondents are willing to accept financial compensation in exchange for surveillance measures that would involve greater invasion of privacy (between 2% for CCTV and 7% for surveillance of financial transactions).

The sharing of information gathered through surveillance by government agencies with other government agencies, or with foreign governments, is deemed acceptable by the majority of respondents if the citizen is suspected of wrong-doing. However, most of these respondents believe it is necessary that the surveillance needs to be legally authorised for it to be acceptable, and sharing information with private companies is much less acceptable even if surveillance has been lawfully authorised. An even lower number of respondents find it fully acceptable, or acceptable even if the citizen is suspected of wrong-doing, for private companies to share a citizen's personal information. Generally, there is a considerable number of respondents who feel that, unless information or consent has been given, private information should "stay private".

Only a minority of German respondents agreed that surveillance may hold social benefits such as the protection of the individual or protection of the community, but risks ("social costs") associated with surveillance seemed to be more keenly felt. The highest risks were perceived to be privacy invasion (mean score 6.60³), misinterpretation (6.47) and intentional misuse of information (6.40) arising from surveillance, followed by loss of control over the usage of one's personal data gathered via surveillance. Discrimination, stigma, and the limitation of citizen rights as consequences of surveillance appear also to be of major concern, though not at the same level. Concern about the disadvantages of surveillance may be the reason that respondents reported some changes in personal behaviour as a consequence of awareness of surveillance. A majority of respondents have stopped accepting discounts in exchange for personal data (75%⁴), about two thirds of the respondents have kept themselves informed about technical possibilities to protect their personal data, and a substantial minority have restricted their activities or the way they behave (41%³), or avoided locations or activities that they suspect are under surveillance (30%³).

There were some significant gender differences in the findings. Female respondents had heard less of the surveillance of "suspicious" behaviour, noticed CCTV cameras less often than male respondents, and were less aware of whether surveillance of financial transactions is taking place. Female respondents also perceived geolocation surveillance for the reduction and detection of crime as well as surveillance of online social networking for the prosecution of crime significantly more useful than male respondents, and they found both those types of surveillance more effective than males. There were no gender-differences in feelings of security, or insecurity due to the presence of surveillance, but male respondents perceived themselves as more in control over their personal information gathered via surveillance measures and expressed more trust that their personal information gathered by government agencies via surveillance measures is protected. However, no statistically significant differences were found between male and female responses regarding general happiness with surveillance measures, or a perceived impact of surveillance on privacy. Female respondents reported less behavioural changes resulting from

³ On a scale from 1 to 7, with 1=disagree, and 7=agree.

⁴ Answers 5, 6 or 7 on a scale from 1 to 7, with 1=disagree and 7=agree.

surveillance than males; in particular, female respondents indicated less often that they had taken defensive measures, and that they had kept themselves informed about technical possibilities to protect their personal data.

A couple of patterns can be identified with regards to age. Respondents aged 65+ rated the usefulness and effectiveness of all types of surveillance higher than other age groups and felt more than others that too little funds are spent on surveillance. Additionally, they felt less insecure in the presence of surveillance, and significantly happier with all types of surveillance than younger respondents. Respondents aged 25-54 showed some more critical and reflective attitudes (e.g., towards the usefulness and effectiveness of surveillance measures, and privacy impact). At the same time though, there are no significant differences between age groups when it comes to the actual adaptation of behaviours to mitigate the risks perceived through surveillance measures that are most common, such as keeping oneself informed about technical possibilities to protect one's personal data, or stopping to accept discounts or vouchers if they are in exchange for one's personal data. This result is consistent with the rather high general knowledge of surveillance across all age groups.

To summarise, the German respondents felt more insecure than secure in the presence of surveillance, and they indicated a strongly felt lack of trust in the protection of, and control over, personal information gathered via surveillance. A majority also feel more unhappy than happy with the different types of surveillance. Additionally, there is a link between feeling happy, or unhappy, about surveillance and feeling secure or insecure through the presence of surveillance. However, analyses also indicate that increasing the perceived effectiveness of surveillance measures and, in particular, increasing the perceived effectiveness of laws regarding the protection of personal data gathered via surveillance may make citizens feel more secure.

Further research is needed to disentangle the relationships between surveillance measures, feelings of security or insecurity, and citizens' general quality of life feelings.

1. Introduction

The analyses and results in this document are based on a survey regarding the perceptions, feelings, attitudes and behaviour of European citizens towards surveillance for the purpose of fighting crime. This study was undertaken as part of the RESPECT project - "Rules, Expectations and Security through Privacy-enhanced Convenient Technologies" (RESPECT; G.A. 285582) – which was co-financed by the European Commission within the Seventh Framework Programme (2007-2013). Quota samples were used for each RESPECT partner country which were based on demographic data retrieved from the Eurostat statistics of December 2012.5 Responses were gathered, predominantly, through an online survey supplemented by a number of questionnaires administered in face to face interviews, in order to fulfil quotas and reach those citizens who do not use the internet. The survey consisted of 50 questions and sub-questions, and was available online in all languages of the European Union from November 2013 until March 2014.⁶ A snowball technique was used to promote the study and disseminate links to the questionnaire. Most RESPECT partners placed advertisements on their respective university/institute website and those of related institutions, sent out press releases and placed banners or advert links in local online newspapers or magazines, posted links to the questionnaire on social networking websites, sent the link out in circular emails (e.g., to university staff and students), and used personal and professional contacts to promote the survey. In order to achieve the quota, in some countries a number of questionnaires were administered in face to face interviews. Typically, these face to face interviews were required for the older age groups as internet usage is not as common amongst older citizens as it is with the younger population.

Overall, 5,361 respondents from 28 countries completed the questionnaire. This total sample shows a very even gender and age distribution, which is unsurprising given that target quotas were set for each RESPECT partner country. The German sample used for this analysis is based on the responses from 250 individuals who indicated Germany as their country of residence. The sample has a gender distribution of 51.2% females and 48.8% males, and an age distribution (see figure 1 below) that represents the aging population in this country.

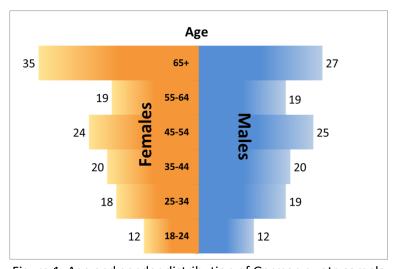


Figure 1: Age and gender distribution of German quota sample

Not fully satisfactory is the high level of education of the majority of respondents (73% with tertiary or post-graduate education). However, this was to be expected due to the majority of responses being collected online as well as several of the recruiting institutions being academic entities, and it coincides with the education level of respondents in the total RESPECT sample (73%). Regarding specific demographic data related to aspects of

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⁵ Source: http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/main_tables.

⁶ The English version of this this questionnaire may be seen in Appendix B.

surveillance, 9% of German respondents (16% of total sample) felt that they were living in an area with increased security risks, 58% (53% total sample) indicated that they usually travel abroad at least twice per year, and 72% (71% total sample) responded that they usually visited a mass event at least twice per year. Therefore, it can be assumed that the majority of respondents are frequently exposed to a variety of surveillance measures that are intended to fight crime.

This report presents results on citizens' perceptions, awareness, acceptance of, and feelings towards, surveillance, and the potential relationships between these factors. Furthermore, separate analyses are dedicated to the social and economic costs of surveillance – covering also the additional aspect of behaviour and behavioural intentions – which are specific tasks within the RESPECT project. Another separate section focuses on how the results on various aspects of surveillance vary with age; gender aspects are discussed throughout all sections alongside the general results.

2. Citizens' knowledge of surveillance

2.1 Awareness of different types of surveillance

Generally, there can be observed a rather large spread in the awareness of different types and technologies of surveillance. Almost all German respondents (96.4%) indicated that they have heard of CCTV, whereas just above a third (37.6%) had heard of the surveillance of "suspicious" behaviour. Although there is a trend for male respondents to be generally more aware of the different types and technologies of surveillance, only one difference is significant, with male respondents indicating a greater awareness of "suspicious" behaviour (difference of 21.1 percentage points).

Table 1
Knowledge of types of surveillance

			Answer = Y	ES
		Total	Female	Male
Q1_1	Biometric data , e.g. analysis of fingerprints, palm prints, facial or body features	87.2%	85.2%	89.3%
Q1_2	"Suspicious" behaviour, e.g. automated detection of raised voices, facial or body features	37.6%	27.3%	48.4%*
Q1_3	Data and traffic on the internet, e.g. Deep Packet/Content inspection	81.2%	78.1%	84.4%
Q1_4	Databases containing personal information, e.g. searching state pension databases, or customer databases of private companies	77.2%	73.4%	81.1%
Q1_5	Online communication , e.g. social network analysis, monitoring of chat rooms or forums	90.4%	89.8%	91.0%
Q1_6	Telecommunication, e.g. monitoring of phone calls or SMS	94.4%	93.0%	95.9%
Q1_7	Electronic tagging / Radio Frequency Identification (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets	84.4%	82.8%	86.1%
Q1_8	Global Positioning Systems (GPS), e.g. tracking geolocation of cars or mobile phones	92.0%	93.0%	91.0%
Q1_9	CCTV cameras, e.g. in public places, airports or supermarkets	96.4%	94.5%	98.4%
Q1_10	Financial information, e.g. tracking of debit/credit card transactions	86.0%	82.0%	90.2%

Q1: Have you ever heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

2.2 Known reasons for surveillance

Most respondents are aware of the main reasons for deploying surveillance. The reason for surveillance that is most known about is the prosecution of crime (92.4%), and the least known is the use of surveillance for control of border-crossings (78.4%). There are no statistically significant gender differences in knowing of the reasons for surveillance specifically asked for.

Table 2
Known reasons for surveillance

			Answer=YES	
		Total	Female	Male
Q2_1	The reduction of crime	83.2%	84.4%	82.0%
Q2_2	The detection of crime	91.6%	89.8%	93.4%
Q2_3	The prosecution of crime	92.4%	95.3%	89.3%
Q2_4	Control of border-crossings	78.4%	73.4%	83.6%
Q2_5	Control of crowds	81.6%	78.9%	84.4%
Q2_6	Other	26.4%	24.2%	28.7%
Q2_7	I don't know of any reasons.	1.2%	0.8%	1.6%

Q2: What reasons for the setting up of surveillance do you know of?

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

3. Perceived usefulness and effectiveness of surveillance

3.1 Perceived usefulness

The surveillance of financial transactions is perceived to be more useful than the other four types of surveillance investigated (CCTV, surveillance using databases containing personal information, surveillance of online social networks, and geolocation surveillance) for the reduction, detection, and prosecution of crime. Generally, the five types of surveillance were perceived to be most useful for the prosecution of crime, slightly less useful for the detection of crime, and less useful still for the reduction of crime. However, only the surveillance of financial transactions and CCTV are perceived to be useful for the detection and prosecution⁷, but not for the reduction of crime. Geolocation surveillance was perceived to be useful only for the prosecution of crime.

Surveillance of financial transactions is perceived to be the most useful of the different types of surveillance, followed by CCTV and geolocation surveillance. Surveillance of online social networking and surveillance using databases containing personal information were perceived not to be useful for detection, prosecution or reduction of crime. There were few significant gender differences in the perception of usefulness of surveillance. Geolocation surveillance for the purposes of reduction or detection of crime and surveillance of online social networking for the prosecution of crime were perceived to be more useful by female than by male respondents.

⁷ Mean result in all categories above the midpoint of 3.00 in Table 3.

Table 3
Perceived usefulness of surveillance

		Total		Female		Male	
Q3.1	the reduction of crime	Mean	STD	Mean	STD	Mean	STD
Q3.1_1	CCTV cameras	2.93	1.458	2.97	1.489	2.89	1.431
Q3.1_2	Surveillance using databases containing personal information	1.94	1.102	2.02	1.128	1.87	1.077
Q3.1_3	Surveillance of online social networking	1.99	1.216	2.09	1.266	1.88	1.161
Q3.1_4	Surveillance of financial transactions	2.94	1.460	2.75	1.490	3.12	1.409
Q3.1_5	Geolocation surveillance	2.54	1.444	2.77	1.488	2.3*	1.363
Q3.2	the detection of crime						
Q3.2_1	CCTV cameras	3.31	1.423	3.28	1.443	3.34	1.407
Q3.2_2	Surveillance using databases containing personal information	2.30	1.306	2.34	1.386	2.27	1.232
Q3.2_3	Surveillance of online social networking	2.25	1.259	2.33	1.274	2.17	1.244
Q3.2_4	Surveillance of financial transactions	3.37	1.426	3.22	1.502	3.54	1.332
Q3.2_5	Geolocation surveillance	2.72	1.493	2.97	1.542	2.47*	1.404
Q3.3	the prosecution of crime						
Q3.3_1	CCTV cameras	3.39	1.376	3.55	1.365	3.24	1.375
Q3.3_2	Surveillance using databases containing personal information	2.75	1.406	2.88	1.477	2.63	1.328
Q3.3_3	Surveillance of online social networking	2.55	1.392	2.73	1.422	2.37*	1.342
Q3.3_4	Surveillance of financial transactions	3.59	1.322	3.59	1.341	3.59	1.307
Q3.3_5	Geolocation surveillance	3.41	1.437	3.59	1.435	3.23	1.423

Q3: How useful in general do you think the following types of surveillance are for [...] (1=not useful at all; 5=very useful)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

The potential relationships between the perceived usefulness of different types of surveillance for the reduction, detection and prosecution of crime were examined (See Table A3 in Appendix A). It appears that there is a relationship between beliefs about the usefulness of the various types of surveillance for different purposes. For example, if a respondent perceives CCTV surveillance as useful for the reduction of crime then the respondent is also likely to perceive this form of surveillance as useful for the detection of crime and prosecution of crime. There is a similar pattern of responses for all types of surveillance: For the surveillance of databases containing personal information and geolocation surveillance, the relationship between perceived usefulness for reduction of crime and perceived usefulness for detection of crime was strongest; for CCTV, the surveillance of online social networking sites and surveillance of financial transactions the strongest relationship was found between the perceived usefulness for detection and the usefulness for prosecution of crime. This pattern of responses suggests that the concepts of reduction, detection, and prosecution of crime may be somewhat entangled. However, it is also possible that some respondents decided on a general "usefulness setting" for each type of technology and answered the questions on the reduction, detection, and prosecution of crime in the same way. The overall closest relationships were found for surveillance of online social networking sites and surveillance of financial transactions between their respective usefulness for detection and their usefulness for prosecution of crime. There were also strong links between the perceived usefulness of geolocation surveillance for the reduction of crime and that of the detection of crime. Furthermore, strong relationships are observed between the perceived usefulness of surveillance using databases containing personal information for the prosecution of crime and the perceived usefulness of surveillance of social networking sites and geolocation surveillance for the same purpose. A similar relationship is present between the perceived usefulness of these types of surveillance for the detection and, less

strong, for the reduction of crime. This may, again, be the result of some respondents not distinguishing much between the different types of surveillance and rather focusing on the usefulness of surveillance generally for different purposes.

There is no correlation between the knowledge of general purposes of surveillance, and the assumed usefulness of specific types of surveillance for these purposes. A reason for this missing link may be that surveillance still represents a somewhat abstract concept for the majority of citizens. To imagine specific purposes, these need to be linked to specific types, technologies or measures of surveillance.

3.2 Effectiveness in protection against crime

The results for perceived effectiveness of the different types of surveillance in protecting against crime follow the same pattern of results as for perceived usefulness of the same types of surveillance in the reduction, detection, and prosecution of crime. However, the different types of surveillance are generally perceived to be less effective in protection against crime than they are deemed to be useful for the reduction, detection, and prosecution of crime, and for all types of surveillance the majority of respondents disagreed rather than agreed that they are an effective way to protect against crime. Comparing perceived usefulness with perceived effectiveness of types of surveillance, for example between 53%8 (detection of crime) and 60%9 (prosecution of crime) of respondents believed that surveillance of financial transactions is useful, but only 41%10 of respondents agreed that it is effective, and whereas between 50% and 60% of respondents believed that CCTV a useful type of surveillance, only 41% deemed it to be effective. Surveillance of financial transactions is perceived to be the most effective (or, rather, least ineffective) surveillance measure in protection against crime, followed by CCTV and geolocation surveillance. Surveillance of online social-networking and surveillance using databases containing personal information are seen to be the least effective methods of protection against crime.

Table 4
Perceived effectiveness of surveillance

		Total		Female		Ma	ale
		Mean	STD	Mean	STD	Mean	STD
Q5.1.1_1	CCTV is an effective way to protect against crime	3.43	1.927	3.44	1.925	3.41	1.937
Q5.1.1_2	Surveillance utilising databases containing personal information is an effective way to protect against crime	2.41	1.599	2.40	1.636	2.43	1.568
Q5.1.1_3	Surveillance of online social-networking is an effective way to protect against crime	2.32	1.587	2.54	1.732	2.1*	1.389
Q5.1.1_4	Surveillance of financial transactions is an effective way to protect against crime	3.66	2.000	3.44	2.008	3.88	1.975
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	2.97	1.945	3.24	2.114	2.69*	1.714

Q5.1.1: How much do you agree or disagree with the following statements [...] (1=disagree; 7=agree)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

⁸ Answers 4 or 5 on a scale from 1 to 5, with 1=not useful at all and 5=very useful.

⁹ Answers 4 or 5 on a scale from 1 to 5, with 1=not useful at all and 5=very useful.

¹⁰ Answers 5, 6 or 7 on a scale from 1 to 7, with 1=disagree and 7=agree.

3.3 Relationship between perceived usefulness and effectiveness

There is, mostly, a clear relationship between the perceived usefulness of a type of surveillance in the reduction, detection, and prosecution of crime and the perceived effectiveness of that type of surveillance in the protection against crime (see Table A22 in Appendix A). The strongest relationship for most types of surveillance is found between perceived usefulness in reduction of crime and perceived effectiveness in the protection against crime. This was the case for CCTV, surveillance using databases containing personal information, and surveillance of financial transactions. In the case of surveillance of online social networking and geolocation surveillance, the perceived effectiveness of these modes of surveillance as a means to protect against crime was related most closely with their perceived usefulness in detection of crime. However, it has to be kept in mind that these relationships do not only link perceived usefulness and perceived effectiveness, but also their negative side – a perceived lack of usefulness and, correspondingly, a perceived lack of effectiveness.

4. Perceptions of surveillance

4.1 Surveillance and feelings of security

As seen in the previous section, only some of the different types of surveillance are perceived as useful in the reduction, detection, and prosecution of crime and, at an even lower level, effective in the protection against crime. Similarly, , surveillance does not produce the feelings of security that may be expected (see Table 5 in next section). Only 12% of respondents feel secure in the presence of surveillance (4 or 5 on a 5-point scale, with 1=very insecure and 5=very secure). But almost half of the respondents (46%) feel insecure (1 or 2 on a 5-point scale, with 1=very insecure and 5=very secure) when surveillance is present. The remaining respondents indicated either the midpoint of the scale (36%), or "I don't know" (6%).

4.2 Personal information collected through surveillance

Respondents generally feel a strong lack of control over the processing of personal information gathered via surveillance, irrespective of whether it has been gathered by government agencies or by private companies. There is also a visible lack of trust in both private companies and government agencies being able to protect personal information gathered via surveillance, but with more mistrust towards private companies than towards government agencies. Consequently, there may not only be a missing link between surveillance and security, but also perceptions of a substantial lack of data protection in connection with personal information gathered through surveillance. Statistically significant gender differences could be found in the feelings of trust into government agencies and control over personal data collected by government agencies, with females respondents indicating a lower level of trust and control than males.

Table 5
Feelings of security, control and trust

		То	tal	Fen	nale	Ma	ale
4.3	Security (1=very insecure; 5=very secure)	Mean	STD	Mean	STD	Mean	STD
	How secure does the presence of surveillance measures make you feel	2.39	1.021	2.34	0.948	2.45	1.090
4.4	Control (1= no control; 5=full control)						
4.4.1	How much control do you think you have over the processing of personal information gathered by government agencies via surveillance measures?	1.65	0.881	1.54	0.885	1.78*	0.864

4.4.2	How much control do you think you have over the processing of personal information gathered by <u>private companies</u> via surveillance measures?	1.50	0.792	1.49	0.817	1.52	0.767
4.5	Trust (1=no trust; 5=complete trust)						
4.5.1	How much do you trust government agencies that they protect your personal information gathered via surveillance measures?	2.08	1.059	1.94	0.986	2.22*	1.114
4.5.2	How much do you trust <u>private companies</u> that they protect your personal information gathered via surveillance measures?	1.42	0.695	1.36	0.665	1.49	0.722

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

4.3 "Happiness" with surveillance

The majority of respondents feel more unhappy than happy with the different types of surveillance. They appear to feel most unhappy with surveillance using databases containing personal information with a large majority of participants feeling unhappy (72%¹¹, mean score 4.08,). About two thirds of respondents felt unhappy with online social networks and geolocation surveillance and one third felt neither happy nor unhappy. In the case of CCTV and the surveillance of financial transactions, the number of those participants who feel unhappy about those types and surveillance and those participants who felt neither happy nor unhappy is fairly evenly distributed (between 40% and 44% respectively) Many respondents (73%) are also unhappy with surveillance taking place without people knowing about it. There is no significant difference between female and male responses.

¹¹ Scores 4 and 5 on a scale from 1=very happy to 5=very unhappy.

Table 6
Happiness with surveillance

		Total		Female		Ma	ale
		Mean	STD	Mean	STD	Mean	STD
5.3_1	Feel happy/unhappy about CCTV cameras	3.52	1.080	3.46	0.984	3.58	1.172
5.3_2	Feel happy/unhappy about surveillance of online social networks	4.03	0.952	3.98	0.959	4.08	0.947
5.3_3	Feel happy/unhappy about surveillance using databases	4.08	0.893	4.05	0.903	4.11	0.886
5.3_4	Feel happy/unhappy about surveillance of financial transactions	3.42	1.045	3.48	1.048	3.36	1.042
5.3_5	Feel happy/unhappy about geolocation surveillance	3.93	0.954	3.83	0.946	4.03	0.955
5.4	Feel happy/unhappy about surveillance taking place without noticing	4.18	0.903	4.19	0.881	4.17	0.928

Q5.3: How happy do you feel about the following types of surveillance [...] (1=very happy; 5=very unhappy)

4.4 Relationship between security and happiness

There are moderate to strong correlations between citizens' feelings of being happy, or unhappy, with different types of surveillance (see table A23 in Appendix A). For example, respondents who are happy or unhappy with surveillance using databases containing personal information are also likely to be happy or unhappy with social-networking surveillance. And those who are happy or unhappy with geolocation surveillance have the same feelings about CCTV, social-networking surveillance, and surveillance using databases containing personal information. As was the case in Section 3.1 above, this may be the result of several respondents not distinguishing much between the different types of surveillance.

There is also a moderate to strong relationship between generally feeling happy or unhappy about different types of surveillance and being happy or unhappy with surveillance taking place without one's knowledge, in particular for the surveillance using databases containing personal information. Additionally, being happy or unhappy with different types of surveillance is moderately related to feelings of security as a consequence of the presence of surveillance; this relation is most evident for CCTV, and least for the surveillance of financial transactions. Furthermore, being happy or unhappy with the different types of surveillance is linked to the perceived usefulness of this type of surveillance for the reduction, detection and prosecution of crimes. However, this relationship is only moderate to strong for, again, CCTV and the surveillance of financial transactions. (see table A9 in Appendix A).

Q5.4: How happy do you feel about surveillance taking place without being aware of it? (1=very happy; 5=very unhappy)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

4.5 Surveillance and privacy

Table 7
Perceptions of privacy

		Total		l Female		Male	
		Mean	STD	Mean	STD	Mean	STD
5.1.2_1	CCTV has a negative impact on one's privacy	4.38	2.258	4.40	2.219	4.37	2.306
5.1.2_2	Surveillance via databases has a negative impact on one's privacy	5.08	2.137	4.89	2.245	5.27	2.015
5.1.2_3	Surveillance of online social networks has a negative impact on one's privacy	4.84	2.272	4.60	2.241	5.07	2.288
5.1.2_4	Surveillance of financial transactions has a negative impact on one's privacy	4.05	2.279	3.96	2.373	4.13	2.196
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy	4.79	2.254	4.60	2.238	4.97	2.263

Q5.1.2: How much do you agree or disagree with the following statements [...] (1=disagree; 7=agree)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

The majority of respondents agreed more than disagreed that most types of surveillance have a negative impact on one's privacy (Table 7). The highest negative impact on privacy was perceived for surveillance using databases containing personal information. Irrespective of their views on the impact of different types of surveillance on privacy, very few respondents, both male and female, are willing to accept financial compensation in exchange for surveillance measures that would involve greater invasion of privacy (Table 8).

Table 8
Financial privacy trade-off

5.1.3	Would you be willing to accept payment as compensation for greater invasion of	Answer=YES					
	your privacy, using:	Total	Female	Male			
5.1.3_1	Surveillance via CCTV cameras	2.2%	1.1%	3.2%			
5.1.3_2	Surveillance of online social networks	2.7%	1.1%	4.2%			
5.1.3_3	Surveillance utilising databases containing personal information	3.8%	2.2%	5.3%			
5.1.3_4	Surveillance of financial transactions	6.5%	3.3%	9.5%			
5.1.3_5	Geolocation surveillance	3.8%	3.3%	4.2%			

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

Respondents' feelings of security or insecurity due to the presence of surveillance are only weakly related to their perceived impact of surveillance on privacy (see table A24 in Appendix A). Perceived impact of surveillance on privacy was only very weakly related with feelings of trust in private companies and government agencies being able to protect personal information gathered via surveillance, and there is practically no relation between a perceived impact of surveillance on privacy and feelings of control over processing of personal information gathered via surveillance. Therefore, despite the clearly perceived lack of trust and control in the context of

personal information gathered during surveillance, and a clearly perceived negative impact of surveillance on one's privacy, these feelings appear not to be necessarily related.

4.6 Relationships between feelings, effectiveness of surveillance measures, and related laws

There are only very weak relationships between the respondents feeling secure due to the presence of surveillance, and feelings of control over their personal data collected through surveillance. Only feelings of security due to the presence of surveillance and trust that personal data gathered by government agencies through surveillance is protected show a moderate link. A similar picture is revealed when looking at the relationship between feelings of control over personal information gathered by government agencies via surveillance measures and trust in its protection (see table A25 Appendix A).

The relationship between the perceived effectiveness of data protection laws and feelings of trust that personal data gathered by government agencies through surveillance is protected is stronger than the relationship with feelings of trust that personal data gathered by private companies is protected. This finding may be due to the fact that data protection laws are perceived as being applied by or being applicable to government agencies more than to private companies. There is a strong relationship between the perceived effectiveness of laws regarding the protection of personal information gathered via surveillance measures and feelings of security produced by surveillance. It is unclear what the basis of such a relationship may be, but it would appear that an increased belief in the effectiveness of data protection laws may produce an increased feeling of security in the presence of surveillance, whilst the respondents' current feelings of insecurity are linked to a perceived low effectiveness of laws¹².

There is also a relationship between perceived effectiveness of different surveillance measures and feelings of security in the presence of surveillance (see table A26 Appendix A), but it is, depending on the type of surveillance, only a weak to moderate one. This suggests that increasing the perceived effectiveness of data protection laws related to surveillance may, to a certain extent, increase citizens' feelings of security in the presence of surveillance more than increasing the effectiveness of such measures themselves.

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¹² Mean score 2.51 on a scale from 1 to 5, with 1=not effective at all and 5=very effective, see table A6 in Appendix A).

5. Awareness of surveillance taking place

5.1 Noticing CCTV

Table 9 Whether CCTV is noticed

Q5.2.1	Total	Female	Male
I never notice CCTV cameras.	2.8%	3.1%	2.5%
I rarely notice CCTV cameras.	17.2%	20.3%	13.9%*
I sometimes notice CCTV cameras.	36.4%	40.6%	32%*
I often notice CCTV cameras.	36.0%	33.6%	38.5%*
I always notice CCTV cameras.	6.8%	2.3%	11.5%*
I don't know / No answer	0.8%	0.0%	1.6%

Q5.2.1: Which of the following best describes you? [...]

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

There are some gender differences in whether CCTV is noticed. Overall, about two fifth of respondents (42.8%) often or always notice CCTV cameras, but there is a significantly higher proportion of male (50%) than female respondents (35.9%) who indicated that they often or always notice CCTV cameras. And as is to be expected, 23.4% of female respondents, but only 16.4% of male respondents, rarely or never notice CCTV cameras.

5.2 Beliefs about surveillance taking place

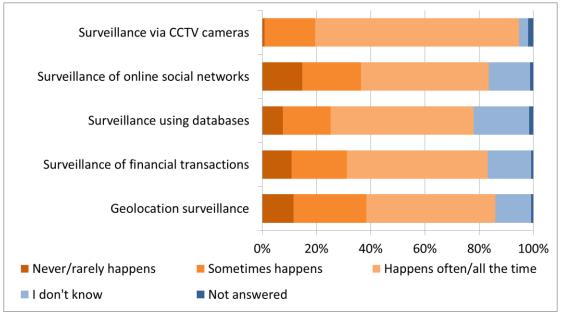


Figure 2: Q5.2.2 – In your opinion, how often do the following types of surveillance take place in the country where you live?

Not very surprisingly, a large majority of respondents believes that CCTV surveillance takes place often or all the time in the country where they live (75.2%). Far fewer respondents believe that the other types of surveillance take place, between 47% and 53% for surveillance of online social-networking, surveillance using databases containing personal information, surveillance of financial transactions and geolocation surveillance. However, there is still a noticeable proportion of respondents who indicated for these types of surveillance that they, actually, "don't know" whether or how often such surveillance takes place in their country (13-16%). Male respondents believe that

surveillance of financial transactions is taking place more often than female respondents. The largest gender difference can be found in the answer "I don't know" where the "gap" is up to 15 percentage points between male and female responses (i.e., female respondents more often indicating "I don't know" than male respondents).

6. Acceptability of data sharing practices

Table 10
Acceptability of data sharing practices of government agencies

	Sharing citizens' information gathered via surveillance measures with other government agencies	Sharing citizens' information gathered via surveillance measures with foreign governments	Sharing citizens' information gathered via surveillance measures with private companies
Fully acceptable in all circumstances	5.2%	3.2%	8.4%
Acceptable only if the citizen is suspected of wrong-doing	13.6%	10.4%	3.2%
Acceptable only if the citizen is suspected of wrong-doing an the surveillance is legally authorised	54.0%	51.6%	15.6%
Acceptable if the citizen is informed	22.0%	17.2%	10.0%
Acceptable if the citizen has given consent	23.2%	24.8%	20.8%
Not acceptable in any circumstances	10.4%	16.8%	48.8%
I don't know	0.8%	1.6%	1.6%

Q7.1: Please indicate the extent to which you believe the following practices of government agencies for fighting crime are acceptable or not: Government agencies share a citizen's information gathered via surveillance measures with [...]

Generally, the sharing of information gathered through surveillance by government agencies with other government agencies or with foreign governments is deemed acceptable by the majority of respondents if the citizen is suspected of wrong-doing. However, most of these respondents believe it is necessary that the surveillance needs to be legally authorised for it to be acceptable. About one out of four participants believe it is acceptable for information gathered through surveillance by government agencies to be shared with other government agencies or with foreign governments if the citizen has given consent. Whilst results regarding the sharing of information with other government agencies or foreign governments are fairly similar, sharing information with private companies is much less acceptable even if surveillance has been lawfully authorised for somebody suspected of wrong-doing. Many respondents (48.8%) think it is unacceptable in all circumstances or only if the citizen has given consent (20.8%) for government agencies to share information gathered through surveillance with private companies.

Table 11
Acceptability of data sharing practices of private companies

	Sharing citizens' information gathered via surveillance measures with government agencies	Sharing citizens' information gathered via surveillance measures with foreign governments	Sharing citizens' information gathered via surveillance measures with other private companies
Fully acceptable in all circumstances	5.2%	5.6%	7.6%
Acceptable only if the citizen is suspected of wrong-doing	12.4%	7.6%	4.4%
Acceptable only if the citizen is suspected of wrong-doing an the surveillance is legally authorised	34.8%	21.6%	10.4%
Acceptable if the citizen is informed	16.0%	12.4%	6.4%
Acceptable if the citizen has given consent	26.0%	23.6%	22.8%
Not acceptable in any circumstances	25.6%	45.2%	51.6%
I don't know	0.8%	1.6%	1.2%

Q7.2: Please indicate the extent to which you believe the following practices of private companies for fighting crime are acceptable or not: Private companies share a citizen's information gathered via surveillance measures with [...]

There is an even lower number of respondents who find it fully acceptable (or acceptable if the citizen is suspected of wrong-doing) if private companies share a citizen's personal information. Lawfulness still has a strong effect, but it is generally less strong than with government sharing practices. Generally, there is a considerable number of respondents who feel that, unless information or consent has been given, private data should "stay private" – particularly information sharing practices between private companies are deemed unacceptable in any circumstances (51.6%).

7. Acceptability of surveillance in different locations

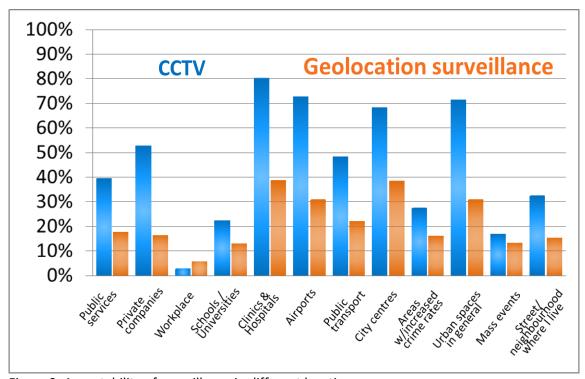


Figure 3: Acceptability of surveillance in different locations Q6.1 – In which of the following locations or events would you find the different types of surveillance for fighting crime acceptable?

CCTV surveillance is perceived as clearly more acceptable than geolocation surveillance for the purposes of fighting crime in all the events and locations investigated. Acceptance rates for CCTV are, typically, double as high as those for geolocation surveillance. There are mostly no gender differences, with the exceptions of clinics/hospitals, city centres and the own neighbourhood where female respondents find geolocation surveillance more acceptable than male respondents, whereas for CCTV the only statistically significant gender difference is in schools and universities where female respondents find that type of surveillance more acceptable than males.

Both types of surveillance are least accepted in the workplace (CCTV 3%, geolocation surveillance 6%). The highest acceptance of surveillance by CCTV is in clinics and hospitals (80%). A possible explanation for this rather surprising result could be that such acceptance levels of surveillance in clinics and hospitals may be related to high levels of trust in the care provided by these institutions, or to an increased perceived vulnerability in these locations that requires higher levels of protection through surveillance. Acceptance levels for CCTV in airports, city centres and urban spaces in general are also comparatively high (68-73%), which in itself is unsurprising — but surveillance in specific areas with increased crime rates is much less acceptable (28%). This may be due to respondents having become accustomed to surveillance in city centres and urban areas.

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¹³ With the exception of workplace surveillance where geolocation surveillance is found to be more acceptable than CCTV, though acceptance for both CCTV and geolocation surveillance in the workplace is extremely low.

8. Economic costs of surveillance

Few respondents believed that the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in their country is "just right"; 16.8% indicated that, in their opinion, there was too little or far too little money allocated, 27.2% believed it was too much or far too much. But overall more than two out of every five respondents felt that they, actually, "don't know" whether sufficient funds were allocated to government agencies for carrying out surveillance for the purpose of fighting crime, with female respondents replying far more often "I don't know" than male respondents.

Those respondents who thought that the money allocated to government agencies for carrying out surveillance to fight crime was too little or far too little were asked whether they are prepared to pay higher taxes so that more money can be allocated for this purpose. Only a quarter of these respondents (26.2%) indicated they would be willing to do so whilst the majority (59.5%) replied that they would not. However, the very low number of respondents to this question (n=42) only allows very cautious interpretations of these results.

Table 12
Beliefs about money allocated to surveillance

	Total	Female	Male
far too little	2.8%	3.1%	2.5%
too little 14.0%		13.3%	14.8%
just right 10.8%		6.3%	15.6%
too much	14.0%	11.7%	16.4%
far too much	13.2%	10.9%	15.6%
I don't know	44.8%	54.7%	34.4%*
No answer	0.4%	0.0%	0.8%

Q6.2: In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country [...]?

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

Table 13
Willingness to pay more taxes to increase budget allocated to carry out surveillance to fight crime

	Total	Female	Male
Yes	26.2%	14.3%	38.1%
No	59.5%	61.9%	57.1%
I don't know	14.3%	23.8%	4.8%
No answer	0.0%	0.0%	0.0%

Q6.2.1: Would you be willing to pay more taxes so that more money is allocated for carrying out surveillance to fight crime? Note: Results in this table related to gender and marked with an asterisk (*) are statistically significant (p<.05); for all other results the respective tests did not show a statistically significant difference between gender.

9. Social costs of surveillance

9.1 Attitudes towards surveillance

Whilst only a minority of respondents agreed that surveillance may hold social benefits such as the protection of the individual citizen and protection of the community, the risks associated with surveillance seemed to be more keenly felt. The highest perceived risk is privacy invasion through surveillance, followed by the risks that information gathered through surveillance is misinterpreted, intentionally misused, or that surveillance may violate citizens' right to control whether information about them is used. The risks that surveillance may cause discrimination or stigma and limit citizen rights (to communication, free speech and information) also appear to be very strong issues, though not at the level of privacy invasion, data misuse and misinterpretation. There were no statistically significant gender differences in the attitudes and perceptions of respondents towards surveillance ("social costs"), except for males disagreeing more than females with the statement that surveillance can be something to play with.

Table 14
Attitudes towards surveillance

		Total		Fem	ale	Male	
		Mean	STD	Mean	STD	Mean	STD
Q8.1.1	Surveillance provides protection to the individual citizen	3.32	1.983	3.21	1.969	3.44	1.999
Q8.1.2	Surveillance provides protection of the community	3.64	2.008	3.57	2.045	3.71	1.975
Q8.1.3	Surveillance can be a source of personal excitement	2.91	2.322	2.64	2.238	3.18	2.382
Q8.1.4	Surveillance can be something to play with	2.90	2.614	3.25	2.708	2.53*	2.471
Q8.1.5	Surveillance may cause discrimination towards specific groups of society	6.13	1.539	6.11	1.602	6.14	1.480
Q8.1.6	Surveillance may be a source of stigma	6.23	1.363	6.29	1.384	6.18	1.344
Q8.1.7	Surveillance may violate a person's privacy	6.60	1.185	6.59	1.202	6.61	1.172
Q8.1.8	Surveillance may violate citizens' right to control whether information about them is used	6.39	1.359	6.46	1.235	6.32	1.479
Q8.1.9	There is a potential that information gathered via surveillance could be intentionally misused	6.40	1.366	6.36	1.461	6.44	1.264
Q8.1.10	There is a potential that information gathered via surveillance could be misinterpreted	6.47	1.266	6.40	1.387	6.55	1.125
Q8.1.11	Surveillance may limit a citizen's right of expression and free speech	6.11	1.652	6.09	1.618	6.14	1.692

Q8.1.12	Surveillance may limit a citizen's right of communication	6.26	1.554	6.16	1.638	6.37	1.461
Q8.1.13	Surveillance may limit a citizen's right of information	6.14	1.589	6.23	1.356	6.04	1.797

Q8.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views. (1=disagree; 7=agree)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant

9.2 Behavioural changes resulting from surveillance

Despite the German respondents' very high level of risk perception, rather few of them have made changes to their behaviour as a result of being aware of surveillance. The two changes in behaviour that were undertaken by a majority of respondents was to stop exchanging their personal data for discounts or vouchers, and keeping themselves informed about technical possibilities to protect their personal data, but only a minority of respondents have taken more proactive moves such as restricting their activities, avoiding surveilled locations or taking defensive measures. In some of these behavioural changes¹⁴, it appears that male respondents are more active, or less inactive, than female respondents.

Table 15
Behaviour changes resulting from an awareness of surveillance

		To	tal	Female		Ma	ale
		Mean	STD	Mean	STD	Mean	STD
Q8.2.1	I have restricted my activities or the way I behave	3.61	2.349	3.42	2.379	3.81	2.309
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place	3.05	2.267	2.91	2.245	3.19	2.290
Q8.2.3	I have taken defensive measures (hiding face, faking data, incapacitating surveillance device)	2.63	2.198	2.33	2.106	2.96*	2.257
Q8.2.4	I have made fun of it	2.35	2.118	2.24	2.074	2.48	2.166
Q8.2.5	I have filed a complaint with the respective authorities	1.76	1.718	1.81	1.820	1.72	1.611
Q8.2.6	I have informed the media	1.66	1.609	1.78	1.809	1.53	1.356
Q8.2.7	I have promoted or participated in collective actions of counter-surveillance	2.17	2.135	1.91	1.889	2.45	2.347
Q8.2.8	I have kept myself informed about technical possibilities to protect my personal data	4.92	2.026	4.59	2.123	5.26*	1.870

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¹⁴ Taking defensive measures and keeping oneself informed about technical possibilities to protect one's personal data.

Q8.2.9	I have stopped accepting discounts or vouchers if they are	5.56	2.083	5.48	2.204	5.65	1.952
	in exchange for my personal data						

Q8.2: To what extent has your awareness of surveillance changed your personal behaviour? Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views. (1=disagree; 7=agree)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

9.3 Perceived social benefits and social costs: Relationships

The two perceived social benefits - protection for the individual citizen and protection for the community, are rather strongly related to each other. Many respondents have the same beliefs about both these benefits. However, these perceived benefits appear to be largely independent of the perceived social costs. Several respondents have the same attitude towards many of the perceived social costs, being likely to respond in the same manner as to

- the potential for surveillance to violate privacy and violate the right of citizens to control whether information collected about them through surveillance is used;
- the potential of privacy violation and the potential of data misinterpretation;
- the potential misinterpretation and misuse of information gathered through surveillance;
- surveillance potentially bearing the risk of discrimination and being a source of stigma;
- and whether surveillance limits the rights of free speech, communication and information (see table A17 in Appendix A).

Additionally, there is a moderate relationship between the perceived social benefits of individual and community protection and the perceived usefulness and effectiveness of most types of surveillance measures investigated in this study (see table A20 in Appendix A).

There are some moderate to strong links between changes in different behaviours as a result of awareness of surveillance. The strongest connections are between filing a complaint with the respective authorities and informing the media, and between taking defensive measures and avoiding locations where surveillance is suspected to take place (see Table A18 in Appendix A). These can be seen to represent certain "strategies" of protection against surveillance, the latter being largely described as the "chilling effect" of surveillance, though it needs to be kept in mind that few respondents have acted in this way (see Table 15 above). Those changes of personal behaviour most often indicated by respondents - not accepting discounts/vouchers in exchange for personal data, and keeping oneself informed about the possibilities of technical data protection – are only weakly related to the other forms of behavioural changes (see Table A18 in Appendix A).

In this study there is little evidence to support a relationship between the perceived negative effects of surveillance and behavioural changes as a result of surveillance (see table A19 in Appendix A). Those social costs which were perceived most often – data misuse, data misinterpretation, violation of privacy and violation of the right to control the use of one's personal data – show only weak relationships with not accepting vouchers in exchange for personal data, and no relationship with other behavioural measures that could, perhaps, be expected in such case (e.g., filing complaints with the responsible authorities).

10. Surveillance and the role of age

Generally, interpreting differences between age groups has to be approached with caution due to the small number of respondents in some of the age groups. However, there can be identified a number of significant differences between age groups and patterns in the distribution of answers which reveal interesting, though not entirely surprising, aspects.

Respondents of all ages show a rather similar level of knowledge of different types of surveillance. Only in the case of surveillance of "suspicious behaviour", such as automated detection of raised voices, facial or body features, there is a significant difference with the 65+ years age group showing a significantly lower knowledge than all other age groups (see table A1 in Appendix A). There are also no significantly different responses between age groups regarding the reasons for the setting up of surveillance (see table A2 in Appendix A).

Although overall only about half of the respondents expressed views about whether enough funds are allocated to government agencies for surveillance, respondents aged 35 to 44 indicated more than other respondents that far too much is spent for this purpose, whereas more 65+ respondents than those of other age groups replied that too little is spent on surveillance (see table A14 in Appendix A).

Regarding the situational awareness of surveillance, there are very few significant differences between age groups. Specifically for surveillance of financial transactions it is the youngest respondents (ages 18-24) who expressed most often their belief that this type of surveillance rarely happens in the country where they live. However, in all age groups and for all types of surveillance at least three out of four respondents did express their opinions (i.e. answers other than "I don't know"), which shows a comparatively high level of general awareness regarding the subject of surveillance itself (see table A13 in Appendix A).

Only some types of surveillance, i.e., CCTV, surveillance of financial transactions and, partially, geolocation surveillance, are perceived by all age groups as more useful than not useful for the detection and prosecution, but mostly not for the reduction of crime (see table A5 in Appendix A). However, whereas the other two types of surveillance investigated in this study (surveillance using databases containing personal information and surveillance of online social networking) were not perceived as useful by the majority of respondents, those aged 65+ did perceive them as more useful than not useful for the prosecution of crime. Generally, CCTV is rated as the most useful form of surveillance for the reduction, detection, and prosecution of crime by respondents aged 18-44, whilst respondents aged 45+ perceived surveillance of financial transactions as the most useful form for all named purposes. Another "generational split" appears in the overall level of perceived usefulness, with respondents aged 25-54 rating the usefulness of all types of surveillance for all named purposes in most cases significantly lower than respondents of the 65+ age group.

A very similar picture is revealed for the perceived effectiveness of surveillance, where the 65+ age group perceive the effectiveness of all types of surveillance to be significantly higher than the 25-54 year olds and, partially, also higher than the 18-24 and the 55-64 year olds (see table A4 in Appendix A). Interestingly, in this context, the largest difference in the perceived effectiveness of laws and regulations regarding the protection of personal data is found between the 55-64 and the 65+ age groups, with those aged 55-64 perceiving these laws as most ineffective and respondents aged 65+ perceiving them as less ineffective.

There are also some significant differences between age groups in their feelings of security, or insecurity, in the presence of surveillance measures. Here, respondents aged 65+ feel significantly less insecure than respondents of the 25-34, 35-44 and, in particular, the 45-54 age groups. Regarding feelings of control over the processing of personal information gathered via government agencies or private companies, and trust (or mistrust) that

government agencies or private companies protect personal information, there are mostly no age-related differences, with the exception of the 18-24 year olds showing significantly less mistrust towards private companies than the 25-34 year olds¹⁵ (see table A7 in Appendix A). However, when being asked how happy or unhappy they feel with the different types of surveillance, the previously described pattern appears with respondents of the 65+ age group feeling significantly happier with all types of surveillance than younger respondents, in particular than the 25-54 year olds (see table A8 in Appendix A). The same difference in feelings applies for surveillance taking place without being aware of it.

Again, a similar age difference can be seen regarding the impact of surveillance on privacy. The 25-54 year olds perceive the negative impact of this type of surveillance on privacy to be significantly stronger than the 65+ year olds, and whilst respondents aged 25-54 more agree than disagree that all types of surveillance have a negative impact on their privacy, respondents aged 65+ more disagree than agree that there is a negative impact¹⁶ (see table A10 in Appendix A). Accepting financial compensation in exchange for more invasion of privacy through surveillance is not an option for most respondents, independent of their age (table A11 in Appendix A).

Despite the significant age-related differences in perceived usefulness and effectiveness of surveillance as well as in the feelings of security and happiness related to the presence of surveillance, there are only few age differences in the perceived social costs, and benefits, of surveillance (see A16a in Appendix A). Respondents of the 65+ age group perceive the suggested social benefits of surveillance – protection of the individual citizen and of the community – significantly stronger than respondents aged 25-54. However, regarding social costs only the 55+ year old respondents stand out perceiving the misuse of information significantly less as a risk than the 35-44 year olds, and the 18-24 year olds perceive the risk of misinterpretation as well as surveillance limiting a citizen's right of expression and free speech significantly less than the 35-44 year old respondents.

Additionally, a number of statistically significant differences can be seen in the behavioural changes of respondents due to surveillance (see table A16b in Appendix A). Although overall few respondents changed their behaviour as a consequence of becoming aware of surveillance, those aged between 25 and 44 years indicated more often that they had done so – in particular restricting their activities or the way they behave, avoiding locations or activities where surveillance is suspected to take place, or taking defensive measures, . Respondents aged 18-24 as well as 55+ had taken action least frequently as a result of becoming aware of surveillance. Making fun of surveillance is the only behavioural change which 18-24 years old respondents have undertaken more than the other age groups, in particular the 55+ year olds.

Overall, it is not completely surprising that younger citizens (age groups 25-44) who have grown up with new technologies, finished their education, taken up a profession and are grounding their opinions on some life experience exhibit some more critical and reflective attitudes (e.g., towards the usefulness and effectiveness of surveillance measures, and impact on privacy) and behavioural changes due to their awareness of surveillance. It is interesting, though, that respondents aged 45-54 show attitudes and perceptions that are at a similar level of those younger citizens, and that in the perception of socials risks there are only very few significant age-related differences at all – the latter a result being potentially related to the rather high general knowledge of surveillance types and technologies across all age groups.

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¹⁵ But with mean scores of 1.75 (18-24 year olds) and 1.22 (25-34 year olds) on a scale of 1-5 with 1=no trust and 7=complete mistrust, a large majority of respondents in both groups show considerably more mistrust than trust.

¹⁶ With the exception of surveillance via databases containing personal information.

11. Conclusion

Overall, the German respondents felt more insecure than secure in the presence of surveillance, and they indicated a strongly felt lack of trust in the protection of, and control over, personal information gathered via surveillance.

Based on the data collected in this study, the majority of German respondents also feel more unhappy than happy with the different types of surveillance investigated, and they feel also unhappy about surveillance taking place without them knowing about it. Additionally, there is a link between feeling happy, or unhappy, about surveillance and feeling secure or insecure through the presence of surveillance.

However, analyses also indicate that increasing the perceived effectiveness of surveillance measures and, in particular, increasing the perceived effectiveness of laws regarding the protection of personal data gathered via surveillance may make citizens feel more secure.

Further research is needed to disentangle the relationships and effects between surveillance measures, feelings of security or insecurity, and citizens' general quality of life feelings.

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Table A1: Knowledge of types of surveillance by age group

			Answer = YES						
		Total	18-24	25-34	35-44	45-54	55-64	65+	
Q1_1	Biometric data , e.g. analysis of fingerprints, palm prints, facial or body features	87.2%	95.8%	94.6%	82.5%	87.8%	89.5%	80.6%	
Q1_2	"Suspicious" behaviour, e.g. automated detection of raised voices, facial or body features	37.6%	33.3%	45.9%	40.0%	53.1%	39.5%	19.4%*	
Q1_3	Data and traffic on the internet , e.g. Deep Packet/Content inspection	81.2%	79.2%	86.5%	87.5%	83.7%	86.8%	69.4%	
Q1_4	Databases containing personal information, e.g. searching state pension databases, or customer databases of private companies	77.2%	70.8%	81.1%	72.5%	79.6%	81.6%	75.8%	
Q1_5	Online communication , e.g. social network analysis, monitoring of chat rooms or forums	90.4%	100.0%	97.3%	92.5%	93.9%	97.4%	74.2%	
Q1_6	Telecommunication , e.g. monitoring of phone calls or SMS	94.4%	91.7%	97.3%	95.0%	98.0%	97.4%	88.7%	
Q1_7	Electronic tagging / Radio Frequency Identification (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets	84.4%	75.0%	83.8%	77.5%	85.7%	94.7%	85.5%	
Q1_8	Global Positioning Systems (GPS), e.g. tracking geolocation of cars or mobile phones	92.0%	95.8%	91.9%	95.0%	91.8%	94.7%	87.1%	
Q1_9	CCTV cameras , e.g. in public places, airports or supermarkets	96.4%	91.7%	100.0%	92.5%	95.9%	97.4%	98.4%	
Q1_10	Financial information , e.g. tracking of debit/credit card transactions	86.0%	95.8%	91.9%	90.0%	79.6%	84.2%	82.3%	

Q1: Have you heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A2: Known reasons for surveillance by age group

			Answer = YES							
		Total	18-24	25-34	35-44	45-54	55-64	65+		
Q2_1	The reduction of crime	83.2%	75.0%	83.8%	75.0%	87.8%	84.2%	87.1%		
Q2_2	The detection of crime	91.6%	87.5%	86.5%	85.0%	93.9%	92.1%	98.4%		
Q2_3	The prosecution of crime	92.4%	91.7%	89.2%	92.5%	91.8%	97.4%	91.9%		
Q2_4	Control of border-crossings	78.4%	70.8%	75.7%	82.5%	73.5%	78.9%	83.9%		
Q2_5	Control of crowds	81.6%	66.7%	86.5%	72.5%	75.5%	94.7%	87.1%		
Q2_6	Other	26.4%	20.8%	35.1%	25.0%	42.9%*	13.2%	19.4%		
Q2_7	I don't know of any reasons.	1.2%	0.0%	2.7%	2.5%	2.0%	0.0%	0.0%		

Q2: What reasons for the setting up of surveillance do you know of?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups); for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A3: Correlations – Usefulness for reduction, detection and prosecution of crime

			Usefulness for REDUCTION of crime									
			CCTV	database	SNS	financialT	geolocat.					
			Q3.1_1	Q3.1_2	Q3.1_3	Q3.1_4	Q3.1_5					
7	CCTV	Q3.1_1	1.000	0.437	0.473	0.438	0.527					
٥	database	Q3.1_2	0.437	1.000	0.670	0.337	0.553					
5	SNS	Q3.1_3	0.473	0.670	1.000	0.330	0.506					
REDUCTION	financT	Q3.1_4	0.438	0.337	0.330	1.000	0.331					
œ	Geoloc.	Q3.1_5	0.527	0.553	0.506	0.331	1.000					
_	CCTV	Q3.2_1	0.657	0.323	0.391	0.317	0.427					
DETECTION	database	Q3.2_2	0.464	0.648	0.564	0.324	0.525					
ECT	SNS	Q3.2_3	0.425	0.487	0.671	0.215	0.435					
ΈT	financT	Q3.2_4	0.415	0.277	0.291	0.639	0.285					
	Geoloc.	Q3.2_5	0.504	0.462	0.462	0.390	0.702					
Z	CCTV	Q3.3_1	0.605	0.324	0.377	0.325	0.392					
PROSECUTION	database	Q3.3_2	0.470	0.550	0.526	0.330	0.477					
EC	SNS	Q3.3_3	0.380	0.400	0.538	0.236	0.446					
SOS	financT	Q3.3_4	0.423	0.290	0.322	0.531	0.352					
4	Geoloc.	Q3.3_5	0.508	0.362	0.375	0.392	0.540					
						TON of crime						
			CCTV	database	SNS	financialT	geolocat.					
			Q3.2_1	database Q3.2_2	SNS Q3.2_3	financialT Q3.2_4	geolocat. Q3.2_5					
z	CCTV	Q3.2_1					_					
NOI	CCTV database	Q3.2_2	Q3.2_1	Q3.2_2 0.511 1.000	Q3.2_3 0.479 0.671	Q3.2_4	Q3.2_5					
ECTION			Q3.2_1 1.000	Q3.2_2 0.511 1.000 0.671	Q3.2_3 0.479	Q3.2_4 0.543 0.516 0.419	Q3.2_5 0.503					
DETECTION	database	Q3.2_2	Q3.2_1 1.000 0.511	Q3.2_2 0.511 1.000	Q3.2_3 0.479 0.671	Q3.2_4 0.543 0.516	Q3.2_5 0.503 0.647					
DETECTION	database SNS	Q3.2_2 Q3.2_3	Q3.2_1 1.000 0.511 0.479	Q3.2_2 0.511 1.000 0.671	Q3.2_3 0.479 0.671 1.000	Q3.2_4 0.543 0.516 0.419	Q3.2_5 0.503 0.647 0.599					
	database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4	Q3.2_1 1.000 0.511 0.479 0.543	Q3.2_2 0.511 1.000 0.671 0.516	Q3.2_3 0.479 0.671 1.000 0.419	Q3.2_4 0.543 0.516 0.419 1.000	Q3.2_5 0.503 0.647 0.599 0.514					
NOIL	database SNS financT Geoloc.	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5	Q3.2_1 1.000 0.511 0.479 0.543 0.503	Q3.2_2 0.511 1.000 0.671 0.516 0.647	Q3.2_3 0.479 0.671 1.000 0.419 0.599	Q3.2_4 0.543 0.516 0.419 1.000 0.514	Q3.2_5 0.503 0.647 0.599 0.514 1.000					
NOIL	database SNS financT Geoloc. CCTV	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1	Q3.2_1 1.000 0.511 0.479 0.543 0.503	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500					
NOIL	database SNS financT Geoloc. CCTV database	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568					
	database SNS financT Geoloc. CCTV database SNS	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554 0.731	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584					
NOIL	database SNS financT Geoloc. CCTV database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457	Q3.2_3	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647					
NOIL	database SNS financT Geoloc. CCTV database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554 0.731 0.392 0.413	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647					
NOIL	database SNS financT Geoloc. CCTV database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457 Usefulness for database	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554 0.731 0.392 0.413 r PROSECU	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436 JTION of crir financialT	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647					
NOIL	database SNS financT Geoloc. CCTV database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554 0.731 0.392 0.413	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647					
PROSECUTION	database SNS financT Geoloc. CCTV database SNS financT	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457 Disefulness for database Q3.3_2 0.555	Q3.2_3	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436 JTION of crir financialT	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647 me geolocat. Q3.3_5 0.620					
PROSECUTION	database SNS financT Geoloc. CCTV database SNS financT Geoloc.	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4 Q3.3_5	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409 CCTV Q3.3_1	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457	Q3.2_3 0.479 0.671 1.000 0.419 0.599 0.443 0.554 0.731 0.392 0.413 r PROSECUSNS Q3.3_3	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436 JTION of crir financialT Q3.3_4	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647 me geolocat. Q3.3_5 0.620 0.625					
PROSECUTION	database SNS financT Geoloc. CCTV database SNS financT Geoloc.	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4 Q3.3_5	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409 CCTV Q3.3_1 1.000	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457 Disefulness for database Q3.3_2 0.555	Q3.2_3	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436 JTION of crir financialT Q3.3_4 0.607	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647 me geolocat. Q3.3_5 0.620					
NOIL	database SNS financT Geoloc. CCTV database SNS financT Geoloc. CCTV	Q3.2_2 Q3.2_3 Q3.2_4 Q3.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4 Q3.3_5	Q3.2_1 1.000 0.511 0.479 0.543 0.503 0.699 0.441 0.356 0.418 0.409 CCTV Q3.3_1 1.000 0.555	Q3.2_2 0.511 1.000 0.671 0.516 0.647 0.463 0.626 0.518 0.444 0.457 Disefulness for database Q3.3_2 0.555 1.000	Q3.2_3	Q3.2_4 0.543 0.516 0.419 1.000 0.514 0.520 0.420 0.387 0.730 0.436 JTION of crir financialT Q3.3_4 0.607 0.528	Q3.2_5 0.503 0.647 0.599 0.514 1.000 0.500 0.568 0.584 0.458 0.647 me geolocat. Q3.3_5 0.620 0.625					

Table A4: Perceived effectiveness of surveillance by age group

		Total		18-24		25-34		35-44	
Q5.1.1	Effectiveness (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Q5.1.1_1	CCTV is an effective way to protect against crime	3.43	1.927	3.38	1.884	3.03 ^A	1.833	3.11	2.011
Q5.1.1_2	Surveillance utilising databases containing personal information is an effective way to protect against crime	2.41	1.599	2.45	1.262	2.48	1.752	2.08 ^A	1.382
Q5.1.1_3	Surveillance of online social- networking is an effective way to protect against crime	2.32	1.587	2.08	1.060	1.97	1.339	1.97 ^A	1.341 ^B
Q5.1.1_4	Surveillance of financial	3.66	2.000	3.04 ^A	1.732	3.11 ^B	1.838	3.08 ^c	1.816
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	2.97	1.945	3.04	1.574	2.61 ^A	1.761	2.41 ^B	1.641

		45-54		55-64		65	+
Q5.1.1	Effectiveness (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD
Q5.1.1_1	CCTV is an effective way to protect against crime Surveillance utilising	3.02 ^B	1.788	3.32	1.901	4.27 ^{AB}	1.885
Q5.1.1_2	databases containing personal information is an effective way to protect against crime	1.83 ^B	1.217	2.22 ^c	1.250	3.20 ^{ABC}	1.957
Q5.1.1_3	Surveillance of online social- networking is an effective way to protect against crime Surveillance of financial	1.98 ^c	1.341	2.42	1.605	3.09 ^{ABC}	1.975
Q5.1.1_4	transactions is an effective way to protect against crime	3.22 ^D	1.885	3.73 ^E	1.924	4.92 ^{ABCDE}	1.941
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	2.41 ^c	1.689	2.97	1.952	3.96 ^{ABC}	2.220

Q5.1.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A5: Perceived usefulness of surveillance by age group

		Total		18-24		25-34		35-44		
Q3.1	the reduction of crime	Mean	STD	Mean	STD	Mean	STD	Mean	ST	
Q3.1_1	CCTV cameras	2.93	1.458	2.88	1.513	2.46 ^A	1.304	2.61 ^B	1.3	
Q3.1_2	Surveillance using databases containing personal information	1.94	1.102	2.13	1.100	1.94	1.153	1.66	0.9	
Q3.1_3	Surveillance of online social networking	1.99	1.216	1.92	1.060	1.79 ^A	1.122	1.59 ^B	0.9	
Q3.1_4	Surveillance of financial transactions	2.94	1.460	2.35 ^A	1.265	2.53 ^B	1.354	2.39 ^c	1.2	
Q3.1_5	Geolocation surveillance	2.54	1.444	2.57	1.308	2.33	1.474	2.03 ^A	1.2	
Q3.2	the detection of crime									
Q3.2_1	CCTV cameras	3.31	1.423	3.12	1.454	3.41	1.518	3.06	1.3	
Q3.2_2	Surveillance using databases containing personal information	2.30	1.306	2.41	1.221	2.29	1.274	1.73 ^{AB}	1.0	
Q3.2_3	Surveillance of online social networking	2.25	1.259	2.17	1.239	2.03	1.055	2.06	1.1	
Q3.2_4	Surveillance of financial transactions	3.37	1.426	3.00 ^A	1.279	3.15 ^B	1.480	2.89 ^c	1.5	
Q3.2_5	Geolocation surveillance	2.72	1.493	2.52 ^A	1.238	2.29 ^B	1.384	2.15 ^c	1.3	
Q3.3	the prosecution of crime									
Q3.3_1	CCTV cameras	3.39	1.376	3.25	1.327	3.25	1.360	3.41	1.3	
Q3.3_2	Surveillance using databases containing personal information	2.75	1.406	2.52 ^A	1.275	2.27 ^B	1.153	2.67	1.3	
Q3.3_3	Surveillance of online social networking	2.55	1.392	2.29	1.197	2.17 ^A	1.124	2.56	1.4	
Q3.3_4	Surveillance of financial transactions	3.59	1.322	3.21 ^A	1.215	3.09 ^B	1.314	3.32 ^c	1.3	
Q3.3_5	Geolocation surveillance	3.41	1.437	3.04 ^A	1.367	3.00 ^B	1.350	3.42	1.4	
		45-	-54	55-64		65+				
Q3.1	the reduction of crime	Mean STD Mean STD Mean		STI)					
Q3.1_1	CCTV cameras	2.61 ^c	1.434	3.08	1.574	3.57 ^{AB}	1.33	32		
Q3.1_2	Surveillance using databases containing personal information	1.58 ^A	0.823	2.00	1.146	2.35 ^A	1.25	1.251		
Q3.1_3	Surveillance of online social networking	1.70 ^C	0.954	2.15	1.282	2.55 ^{ABO}	² 1.47	1.475		
Q3.1_4	Surveillance of financial transactions	2.67 ^D	1.446	3.21	1.473	3.79 ^{ABC}	1.34	1.348		
Q3.1_5	Geolocation surveillance	2.02^B	1.252	2.94	1.516	3.10 ^{AB}	1.47	1.470		
Q3.2	the detection of crime									
Q3.2_1	CCTV cameras	2.89 ^A	1.433	3.19	1.424	3.88 ^A	1.27	1.272		
Q3.2_2	Surveillance using databases containing personal information	1.79 ^{CD}	1.103	2.65 ^{AC}	1.323	2.84 ^{BD}	1.41	1.419		
Q3.2_3	Surveillance of online social networking	1.94 ^A	1.169	2.47	1.367	2.72 ^A	1.35	1.350		
Q3.2_4	Surveillance of financial transactions	2.89 ^D	1.402	3.76	1.281	4.08 ^{ABC}	D 1.17	1.179		
Q3.2_5	Geolocation surveillance	2.20 ^D	1.344	3.06	1.516	3.62 ^{ABC}	1.40	1.400		

STD 1.379

0.937

0.925

1.225

1.218

1.308

1.008

1.179

1.510

1.351

1.322

1.315

1.423

1.375

1.461

Q3.3_2 Surveillance using databases containing personal information Q3.3_3 Surveillance of online social networking Q3.3_4 Surveillance of financial transactions 2.23° 2.23° 2.23° 2.294 1.556 3.53 ^{ABC} 2.367 2.11 ^B 1.215 2.71 1.548 3.21 ^{AB} 3.21 ^{AB} 1.446 2.386 1.353 4.34 ^{ABCD} 0.843	Q3.3	the prosecution of crime						
Containing personal information Q3.3_3	Q3.3_1	CCTV cameras	2.71 ^A	1.392	3.39	1.460	4.05 ^A	1.111
Q3.3_3 networking 2.11° 1.215 2.71 1.548 3.21 ^{AB} 1.446 Q3.3_4 Surveillance of financial transactions 3.22 ^D 1.412 3.86 1.353 4.34 ^{ABCD} 0.843	Q3.3_2		2.23 ^c	1.255	2.94	1.556	3.53 ^{ABC}	1.367
U3.3_4 transactions 3.22 1.412 3.86 1.353 4.34 5 0.843	Q3.3_3		2.11 ^B	1.215	2.71	1.548	3.21 ^{AB}	1.446
Q3.3_5 Geolocation surveillance 3.02 ^c 1.485 3.50 1.444 4.05 ^{ABC} 1.265	Q3.3_4		3.22 ^D	1.412	3.86	1.353	4.34 ^{ABCD}	0.843
	Q3.3_5	Geolocation surveillance	3.02 ^c	1.485	3.50	1.444	4.05 ^{ABC}	1.265

Q3: How useful in general do you think the following types of surveillance are for the reduction / detection / prosecution of crime? (1=not at all useful; 5=very useful)

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A6: Knowledge and perception of laws by age group

		Total		18-24		25-34		35-44	
		Mean	STD	Mean	STD	Mean	STD	Mean	STD
	Knowledge about laws and								
4.1	regulations regarding the protection of personal data (1=I don't know anything; 5=I am very well informed)	2.94	1.119	3.00	0.933	3.44 ^{AB}	1.054	3.26 ^c	1.117
4.2	Effectiveness of these laws (1= not effective at all; 5= very effective)	2.51	0.909	2.61	0.891	2.48	0.851	2.38	1.083

		45-54		55-	-64	65	+
		Mean	STD	Mean	STD	Mean	STD
	Knowledge about laws and						
	regulations regarding the						
4.1	protection of personal data (1=I	2.98	1.181	2.68 ^A	1.042	2.56 ^{BC}	1.081
	don't know anything; 5=I am very						
	well informed)						
4.2	Effectiveness of these laws (1= not effective at all; 5= very effective)	2.36	0.932	2.24 ^A	0.739	2.95 ^A	0.804

Q4.1: How much do you know about the laws and regulations of your country regarding the protection of your personal information gathered via surveillance measures? (1=I don't know anything about such laws and regulations, 5=I am very well informed)

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Q4.2: How effective do you find these laws and regulations? (1=not effective at all, 5=very effective)

Table A7: Feelings of security, control and trust by age group

		Total		18	-24	25-34		35-44	
4.3	Security (1=very insecure; 5=very secure)	Mean	STD	Mean	STD	Mean	STD	Mean	STD
	How secure does the presence of surveillance measures make you feel	2.39	1.021	2.38	1.135	2.15 ^A	1.077	2.24 ^B	1.090
4.4	Control (1= no control; 7=full control)								
4.4.1	Control over processing of personal information gathered via government agencies	1.65	0.881	1.83	0.868	1.86	0.931	1.74	0.938
4.4.2	Control over processing of personal information gathered via private companies	1.50	0.792	1.75	0.794	1.54	0.803	1.46	0.720
4.5	Trust (1=no trust; 7=complete trust)								
4.5.1	Trust into government that they protect personal information Trust into private companies that	2.08	1.059	2.38	1.135	2.08	1.090	1.92	1.050
4.5.2	they protect personal information	1.42	0.695	1.75 ^A	0.794	1.22 ^A	0.479	1.26	0.498
		45-	·54	55-	64	6	55+		
4.3	Security (1=very insecure; 5=very secure)	45- Mean	54 STD	55- Mean	64 STD	6 Mean	5+ STD		
4.3	5=very secure) How secure does the presence of surveillance measures make you						STD	0	
4.3	5=very secure) How secure does the presence of	Mean	STD	Mean	STD	Mean	STD	0	
	5=very secure) How secure does the presence of surveillance measures make you feel Control (1= no control; 7=full	Mean	STD	Mean	STD	Mean	STD 0.85		
4.4	5=very secure) How secure does the presence of surveillance measures make you feel Control (1= no control; 7=full control) Control over processing of personal information gathered	Mean 1.98 ^c	STD 0.856	Mean 2.50	STD 0.941	Mean 2.93 ^{ABC}	STD 0.85 0.94	5	
4.4 4.4.1	5=very secure) How secure does the presence of surveillance measures make you feel Control (1= no control; 7=full control) Control over processing of personal information gathered via government agencies Control over processing of personal information gathered	Mean 1.98 ^c 1.49	STD 0.856 0.820	Mean 2.50 1.59	STD 0.941 0.725	Mean 2.93 ^{ABC} 1.57	STD 0.85	5	
4.4 .4.1 4.4.2	How secure does the presence of surveillance measures make you feel Control (1= no control; 7=full control) Control over processing of personal information gathered via government agencies Control over processing of personal information gathered via private companies Trust (1=no trust; 7=complete trust) Trust into government that they protect personal information	Mean 1.98 ^c 1.49	STD 0.856 0.820	Mean 2.50 1.59	STD 0.941 0.725	Mean 2.93 ^{ABC} 1.57	0.85 0.94 0.86	5 9	
4.4 4.4.1 4.4.2 4.5	How secure does the presence of surveillance measures make you feel Control (1= no control; 7=full control) Control over processing of personal information gathered via government agencies Control over processing of personal information gathered via private companies Trust (1=no trust; 7=complete trust) Trust into government that they	Mean 1.98 ^c 1.49	0.856 0.820 0.863	Mean 2.50 1.59	STD0.9410.7250.574	Mean 2.93 ^{ABC} 1.57	0.85 0.94 0.86	5 9	

Q4.3: How secure does the presence of surveillance measures make you feel? (1=very insecure, 5=very secure)

Q4.4.1/Q4.4.2: How much control do you think you have over the processing of your personal information gathered via government agencies/private companies? (1=no control, 5=full control)

Q4.5.1/Q4.52: How much do you trust government agencies/private companies that they protect your personal information gathered via surveillance measures? (1=no trust, 5=complete trust)

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A8: Happiness with surveillance by age group

		Total		18-24		25-34		35-44	
5.3	Happy/unhappy with surveillance (1=very happy, 5=very unhappy)	Mean	STD	Mean	STD	Mean	STD	Mean	STD
5.3_1	Feel happy/unhappy about CCTV cameras	3.52	1.080	3.33	1.204	3.95 ^A	1.079	3.76 ^B	1.101
5.3_2	Feel happy/unhappy about surveillance of online social networks	4.03	0.952	4.04	0.806	4.33 ^A	0.926	4.33 ^B	0.793
5.3_3	Feel happy/unhappy about surveillance using databases	4.08	0.893	4.09	0.793	4.29 ^A	0.667	4.29 ^B	0.835
5.3_4	Feel happy/unhappy about surveillance of financial transactions	3.42	1.045	3.54 ^A	0.977	3.73 ^B	1.097	3.81 ^c	0.938
5.3_5	Feel happy/unhappy about geolocation surveillance	3.93	0.954	4.13 ^A	0.869	4.24 ^B	1.011	4.17 ^c	0.910
5.4	Feel happy/unhappy about surveillance taking place without noticing	4.18	0.903	4.00	1.022	4.39 ^A	0.994	4.48 ^B	0.679

		45-54		55-	64	65+		
5.3	Happy/unhappy with surveillance (1=very happy, 5=very unhappy)	Mean	STD	Mean	STD	Mean	STD	
5.3_1	Feel happy/unhappy about CCTV cameras	3.96 ^c	1.074	3.32	0.962	2.95 ^{ABC}	0.782	
5.3_2	Feel happy/unhappy about surveillance of online social networks	4.27 ^C	0.949	4.03 ^D	1.000	3.42 ^{ABCD}	0.842	
5.3_3	Feel happy/unhappy about surveillance using databases	4.42 ^c	0.723	4.05	1.026	3.53 ^{ABC}	0.912	
5.3_4	Feel happy/unhappy about surveillance of financial transactions	3.75 ^D	1.014	3.19	0.967	2.81 ^{ABCD}	0.888	
5.3_5	Feel happy/unhappy about geolocation surveillance	4.28 ^D	0.797	3.76	0.998	3.36 ^{ABCD}	0.788	
5.4	Feel happy/unhappy about surveillance taking place without noticing	4.42 ^c	0.821	4.08	0.954	3.80 ^{ABC}	0.826	

Q5.3: How happy or unhappy do you feel about the following types of surveillance? [...}

Q5.4: Surveillance may take place without people knowing about it. How do you feel about this?

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A9: Correlations – Usefulness and happiness / feeling of security

				HAPPINES	Feeling of			
			CCTV	Database	SNS	FinancT	Geoloc.	SECURITY
			Q5.3_1	Q5.3_3	Q5.3_2	Q5.3_4	Q5.3_5	Q4.3
for N	CCTV	Q3.1_1	-0.622	-0.436	-0.405	-0.344	-0.475	0.516
	database	Q3.1_2	-0.352	-0.387	-0.464	-0.287	-0.341	0.34
ulness i UCTIO crime	SNS	Q3.1_3	-0.337	-0.542	-0.406	-0.275	-0.360	0.329
J ~ "	financialT	Q3.1_4	-0.358	-0.354	-0.346	-0.564	-0.422	0.343
D –	geolocat.	Q3.1_5	-0.438	-0.396	-0.362	-0.279	-0.484	0.414
sefulness for DETECTION of crime	CCTV	Q3.2_1	-0.616	-0.454	-0.446	-0.407	-0.480	0.457
	database	Q3.2_2	-0.424	-0.469	-0.444	-0.341	-0.464	0.448
Usefulness DETECTIO of crime	SNS	Q3.2_3	-0.438	-0.525	-0.354	-0.275	-0.393	0.328
sefu SET of	financialT	Q3.2_4	-0.367	-0.327	-0.312	-0.579	-0.364	0.341
š L	geolocat.	Q3.2_5	-0.455	-0.462	-0.370	-0.347	-0.508	0.403
o Z	CCTV	Q3.3_1	-0.572	-0.434	-0.397	-0.375	-0.448	0.465
ss f JTIC ne	database	Q3.3_2	-0.493	-0.465	-0.473	-0.384	-0.485	0.436
Usefulness for PROSECUTION of crime	SNS	Q3.3_3	-0.416	-0.512	-0.361	-0.295	-0.415	0.338
sefu Sosi of	financialT	Q3.3_4	-0.418	-0.355	-0.320	-0.486	-0.403	0.363
ĭ %	geolocat.	Q3.3_5	-0.484	-0.428	-0.367	-0.407	-0.480	0.428

Table A10: Perceptions of privacy by age group

		Total		18-	24	25-34		35-44	
5.1.2	Privacy (1=disagree; 7=agree)	Mean :	STD	Mean	STD	Mean	STD	Mean	STD
5.1.2_1	CCTV has a negative	4.38 2	.258	4.21	2.284	5.51 ^{AB}	1.758	5.16 ^{CD}	2.021
5.1.2_2	databases has a negative impact on one's privacy	5.08 2	.137	5.14	2.167	5.64 ^A	1.676	5.74 ^B	1.755
5.1.2_3	negative impact on one's privacy	4.84 2	.272	5.08	2.104	5.64 ^A	1.854	5.43 ^B	1.836
5.1.2_4	on one's privacy	4.05 2	.279	4.00	2.256	4.86 ^A	2.086	5.29 ^{BD}	1.661
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy		.254	4.57	2.15	5.89 ^A	1.526	6.00 ^B	1.323
	Privacy (1=disagree;		-54	5:	5-64	6!	5+		
5.1.2	7=agree)	Mean	STD	Mean	STD	Mean	STD		
5.1.2_1	CCTV has a negative impact on one's privacy	4.94 ^E	2.079	3.67 ^{AC}	2.280	3.22 ^{BDE}	2.193		
5.1.2_2	Surveillance via databases has a negative impact on one's privacy	5.58 ^c	1.994	4.83	2.348	4.05 ^{ABC}	2.239		
5.1.2_3	Surveillance of online social networks has a negative impact on one's privacy	5.09	2.254	4.49	2.594	3.81 ^{AB}	2.332		
5.1.2_4	Surveillance of financial transactions has a negative impact on one's privacy	4.44 ^c	2.170	3.37 ^D	2.327	2.89 ^{ABC}	2.188		
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy	5.28 ^c	2.175	4.56	2.419	3.29 ^{ABC}	2.216		

Q5.1.2: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A11: Financial privacy trade-off by age group

			ANSWER = YES						
5.1.3		Total	18-24	25-34	35-44	45-54	55-64	65+	
5.1.3_1	Surveillance via CCTV cameras	2.2%	11.1%*	0.0%	3.0%	2.6%	0.0%	0.0%	
5.1.3_2	Surveillance of online social networks	2.7%	11.1%*	5.4%	0.0%	0.0%	0.0%	2.9%	
5.1.3_3	Surveillance utilising databases containing personal information	3.8%	16.7%*	2.7%	3.0%	0.0%	0.0%	5.9%	
5.1.3_4	Surveillance of financial transactions	6.5%	0.0%	10.8%	6.1%	2.6%	4.2%	11.8%*	
5.1.3_5	Geolocation surveillance	3.8%	5.6%	2.7%	6.1%	2.6%	4.2%	2.9%	

Q5.1.3: Would you be willing to accept payment as compensation for greater invasion or your privacy, using: [...]

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A12: Awareness of CCTV by age group

Q5.2.1	Which of the following best describes you?	Total	18-24	25-34	35-44	45-54	55-64	65+
	I never notice CCTV cameras.	2.8%	0.0%	2.7%	0.0%	2.0%	2.6%	6.5%
		17.2				20.4	15.8	21.0
	I rarely notice CCTV cameras.	%	8.3%	21.6%	10.0%	%	%	%
		36.4	45.8	13.5%		38.8	42.1	43.5
	I sometimes notice CCTV cameras.	%	%	*	32.5%	%	%	%
		36.0	37.5			34.7	36.8	27.4
	I often notice CCTV cameras.	%	%	48.6%	37.5%	%	%	%
					20.0%			
	I always notice CCTV cameras.	6.8%	8.3%	10.8%	*	4.1%	0.0%	1.6%
	I don't know / No answer	0.8%	0.0%	2.7%	0.0%	0.0%	2.6%	0.0%

Q5.2.1: Which of the following best describes you?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A13: Beliefs about surveillance taking place by age group

Q5.2.2 Q5.2.2_	In your opinion, how often do the following types of surveillance take place in the country where you live?	Total	18-24	25-34	35-44	45-54	55-64	65+
1	Surveillance via CCTV cameras							
_	Never happens	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rarely happens	0.8%	4.2%	0.0%	0.0%	2.0%	0.0%	0.0%
	nately happens	18.8	11270	29.7	20.0	10.2	10.5	0.070
	Sometimes happens	%	20.8%	%	%	%	%	22.6%
		47.6		32.4	40.0	53.1	60.5	
	Often happens	%	54.2%	%	%	%	%	46.8%
		27.6		35.1	35.0	28.6	28.9	
	Happens all the time	%	20.8%	%	%	%	%	19.4%
	I don't know	3.2%	0.0%	2.7%	0.0%	6.1%	0.0%	6.5%
	Not answered	2.0%	0.0%	0.0%	5.0%	0.0%	0.0%	4.8%
Q5.2.2_	Surveillance of online social							
2	networks		ı					
	Never happens	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
		14.4		16.2	10.0	14.3	15.8	
	Rarely happens	%	25.0%	%	%	%	%	11.3%
		21.6	0.00/	24.3	22.5	26.5	18.4	22.60/
	Sometimes happens	% 20.0	8.3%	% 27.0	%	% 20.6	% 24.6	22.6%
	Often hannens	28.0 %	27 50/	27.0 %	20.0 %	28.6 %	31.6 %	27.4%
	Often happens	70 19.2	37.5%	21.6	⁷⁰ 27.5	% 18.4	⁷⁰ 21.1	27.470
	Happens all the time	19.2 %	20.8%	21.0 %	27.5 %	18.4 %	21.1 %	11.3%
	riappens an the time	15.2	20.070	10.8	17.5	12.2	13.2	11.570
	I don't know	%	8.3%	%	%	%	%	22.6%
	Not answered	1.2%	0.0%	0.0%	2.5%	0.0%	0.0%	3.2%
Q5.2.2_ 3	Surveillance utilising databases containing personal information		,					
•	Never happens	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
			0.070	0.070		10.2		
	Rarely happens	7.6%	16.7%	5.4%	7.5%	%	7.9%	3.2%
		17.6		21.6			23.7	27.4%
	Sometimes happens	%	12.5%	%	7.5%	8.2%	%	*
	Often hannens	32.4	44 70/	37.8	32.5	38.8	26.3	24.20/
	Often happens	% 20.4	41.7%	% 16.2	% 35.0	% 18.4	% 23.7	24.2%
	Happens all the time	20.4 %	8.3%	10.2 %	33.0 %	16.4 %	23.7 %	17.7%
	riappens an the time	20.4	0.570	16.2	15.0	22.4	18.4	17.770
	I don't know	%	20.8%	%	%	%	%	25.8%
	Not answered	1.6%	0.0%	2.7%	2.5%	2.0%	0.0%	1.6%
Q5.2.2_	. Tot answered	2.070	1 0.070	21,7,0	2.370	2.070	0.070	2.070
4	Surveillance of financial transactions							
	Never happens	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	• •	10.8	29.2%	13.5			13.2	
	Rarely happens	%	*	%	2.5%	8.2%	%	8.1%
		20.4		27.0	20.0	12.2	23.7	
	Sometimes happens	%	12.5%	%	%	%	%	24.2%

		32.4		29.7	32.5	36.7	39.5	
	Often happens	%	33.3%	%	%	%	%	25.8%
		19.6		13.5	25.0	28.6	15.8	
	Happens all the time	%	12.5%	%	%	%	%	17.7%
		16.0		16.2	17.5	14.3		
	I don't know	%	12.5%	%	%	%	7.9%	22.6%
	Not answered	0.8%	0.0%	0.0%	2.5%	0.0%	0.0%	1.6%
Q5.2.2_								
5	Geolocation surveillance		_					
	Never happens	1.2%	4.2%	2.7%	0.0%	0.0%	0.0%	1.6%
		10.4		10.8	10.0	12.2	10.5	
	Rarely happens	%	4.2%	%	%	%	%	11.3%
		26.8		18.9	22.5	32.7	26.3	
	Sometimes happens	%	45.8%	%	%	%	%	22.6%
		28.0		32.4	25.0	24.5	34.2	
	Often happens	%	29.2%	%	%	%	%	25.8%
		19.6		24.3	25.0	14.3	21.1	
	Happens all the time	%	8.3%	%	%	%	%	21.0%
		13.2		10.8	15.0	16.3		
	I don't know	%	8.3%	%	%	%	7.9%	16.1%
	Not answered	0.8%	0.0%	0.0%	2.5%	0.0%	0.0%	1.6%

Q5.2.2: In your opinion, how often do the following types of surveillance take place in the country where you live? Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A14: Beliefs about economic costs of surveillance by age group

Q6.2	18-24	25-34	35-44	45-54	55-64	65+
far too little	0.0%	5.4%	0.0%	4.1%	2.6%	3.2%
too little	16.7%	2.7%	2.5%	10.2%	10.5%	32.3%*
just right	8.3%	18.9%	12.5%	6.1%	15.8%	6.5%
too much	25.0%	16.2%	15.0%	24.5%	7.9%	3.2%*
far too much	8.3%	24.3%	25.0%*	18.4%	7.9%	0.0%*
I don't know	41.7%	32.4%	42.5%	36.7%	55.3%	54.8%
No answer	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%

Q6.2: In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country: [...]

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A15: Willingness to increase economic costs of surveillance by age group

Q6.2.1	18-24	25-34	35-44	45-54	55-64	65+
Yes	50.0%	100.0%*	0.0%	0.0%	40.0%	18.2%
No	0.0%	0.0%	100.0%	85.7%	60.0%	68.2%
I don't know	50.0%	0.0%	0.0%	14.3%	0.0%	13.6%
No answer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Q6.2.1: Would you be willing to pay more taxes so that more money is allocated for carrying out surveillance to fight crime? Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A16a: Social costs by age group – Attitudes and perceptions

		Total		18	-24	25-	-34	35-	44
Q8.1	Attitudes and perceptions (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Q8.1.1	Surveillance provides protection to the individual citizen	3.32	1.983	3.71	1.922	2.92	1.706	2.59 ^A	1.482
Q8.1.2	Surveillance provides protection of the community	3.64	2.008	4.17	1.880	3.11 ^A	1.822	2.95 ^B	1.820
Q8.1.3	Surveillance can be a source of personal excitement	2.91	2.322	3.20	2.167	3.35	2.251	2.97	2.378
Q8.1.4	Surveillance can be something to play with	2.90	2.614	2.90	2.488	2.62	2.450	2.69	2.587
Q8.1.5	Surveillance may cause discrimination	6.13	1.539	5.50	1.745	6.50	1.028	6.18	1.522
Q8.1.6	Surveillance may be a source of stigma	6.23	1.363	5.67	1.623	6.39	1.153	6.31	1.105
Q8.1.7	Surveillance may violate a person's privacy	6.60	1.185	6.46	1.351	6.70	1.051	6.90	0.307
Q8.1.8	Violation of citizens' right to control of information use	6.39	1.359	6.17	1.404	6.65	1.111	6.67	1.009
Q8.1.9	Potential that information could be intentionally misused	6.40	1.366	6.33	1.274	6.35	1.358	6.79 ^A	0.522
Q8.1.10	Potential that information could be misinterpreted	6.47	1.266	5.75 ^A	1.595	6.43	1.191	6.77 ^A	0.536
Q8.1.11	Limiting a citizen's right of expression and free speech	6.11	1.652	5.38 ^A	2.143	6.35	1.184	6.64 ^A	0.903
Q8.1.12	Surveillance may limit a citizen's right of communication	6.26	1.554	5.74	1.630	6.62	1.010	6.39	1.405
Q8.1.13	Surveillance may limit a citizen's right of information	6.14	1.589	5.54	1.841	6.44	1.211	6.55	1.179

		45-54		55	-64	65	+
Q8.1	Attitudes and perceptions (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD
Q8.1.1	Surveillance provides protection to the individual citizen	2.70 ^B	1.718	3.76	2.247	4.10 ^{AB}	2.145
Q8.1.2	Surveillance provides protection of the community	2.98 ^c	1.667	3.68	2.174	4.67 ^{ABC}	1.989
Q8.1.3	Surveillance can be a source of personal excitement	2.40	2.131	2.33	2.139	3.23	2.611
Q8.1.4	Surveillance can be something to play with	2.91	2.657	2.27	2.254	3.53	2.885
Q8.1.5	Surveillance may cause discrimination	6.33	1.383	6.08	1.663	6.00	1.708

Q8.1.6	Surveillance may be a source of stigma	6.27	1.388	6.24	1.415	6.27	1.471
Q8.1.7	Surveillance may violate a person's privacy	6.44	1.583	6.51	1.193	6.58	1.181
Q8.1.8	Violation of citizens' right to control of information use	6.32	1.617	6.32	1.233	6.26	1.526
Q8.1.9	Potential that information could be intentionally misused	6.38	1.362	6.81 ^B	0.462	5.97 ^{AB}	1.925
Q8.1.10	Potential that information could be misinterpreted	6.35	1.614	6.66	0.815	6.57	1.335
Q8.1.11	Limiting a citizen's right of expression and free speech	6.23	1.741	6.00	1.871	5.90	1.749
Q8.1.12	Surveillance may limit a citizen's right of communication	6.15	1.822	6.24	1.517	6.26	1.669
Q8.1.13	Surveillance may limit a citizen's right of information	6.02	1.757	5.88	1.737	6.17	1.628

Q8.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A16b: Social costs by age group – Behavioural changes

	-	То	tal	18-24		25-34		35-44	
Q8.2	Changes of personal behaviour (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Q8.2.1	I have restricted my activities or the way I behave	3.61	2.349	2.25 ^{AB}	1.539	4.26 ^{AC}	2.077	4.67 ^{BD}	2.228
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place	3.05	2.267	1.92 ^{AB}	1.640	3.86 ^A	2.332	3.77 ^B	2.230
Q8.2.3	I have taken defensive measures (hiding face, faking data etc.)	2.63	2.198	3.04	2.266	3.14 ^A	2.270	3.65 ^{BC}	2.371
Q8.2.4	I have made fun of it	2.35	2.118	3.50 ^{AB}	2.521	2.69	2.193	3.11 ^{CD}	2.553
Q8.2.5	I have filed a complaint with the respective authorities	1.76	1.718	1.54	1.250	1.86	1.743	2.09	1.900
Q8.2.6	I have informed the media I have promoted or	1.66	1.609	1.48	1.310	1.66	1.533	1.83	1.654
Q8.2.7	participated in collective actions of counter-surveillance	2.17	2.135	2.17	2.099	2.36	2.232	2.22	2.307
Q8.2.8	have kept myself informed about technical possibilities to protect my personal data	4.92	2.026	4.54	1.769	5.38	1.479	5.28	1.959

		45-54		55	-64	65+		
Q8.2	Changes of personal behaviour (1=disagree; 7=agree)	Mean	STD	Mean	STD	Mean	STD	
Q8.2.1	I have restricted my activities or the way I behave	3.83	2.200	3.72	2.570	2.81 ^{CD}	2.395	
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place I have taken defensive	3.19	2.120	2.54	2.142	2.74	2.409	
Q8.2.3	measures (hiding face, faking data etc.)	3.06 ^D	2.250	1.80 ^B	1.729	1.63 ^{ACD}	1.686	
Q8.2.4	I have made fun of it	2.43	2.073	1.46 ^{AC}	1.146	1.74 ^{BD}	1.733	
Q8.2.5	I have filed a complaint with the respective authorities	1.98	1.930	1.47	1.440	1.61	1.764	
Q8.2.6	I have informed the media	1.85	1.805	1.56	1.502	1.55	1.687	
Q8.2.7	I have promoted or participated in collective actions of counter-surveillance	2.91	2.496	1.73	1.663	1.69	1.789	
Q8.2.8	have kept myself informed about technical possibilities to protect my personal data	5.27	2.060	4.92	1.920	4.27	2.355	
Q8.2.9	I have stopped accepting discounts or vouchers if they are in exchange for my personal data	5.69	2.023	5.45	2.202	5.17	2.388	

Q8.2: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (A), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A17: Correlations – Social costs (perceptions)

Social costs I (perceptions)		Protection of individual citizen	Protection of community	Source of excitement	Something to play with	Cause of discrimination	Source of stigma	Violates privacy	Violates right to control data	Potential misuse	Potential mis- interpretation	Limits right of free speech	Limits right of communi cation	Limits right of information
		Q8.1_1	08.1_2	Q8.1_3	Q8.1_4	Q8.1_5	Q8.1_6	Q8.1_7	08.1_8	Q8.1_9	Q8.1_10	Q8.1_11	Q8.1_12	Q8.1_13
Protection individual citizen	Q8.1_1	1.000												
Protection of community	Q8.1_2	0.775	1.000											
Source of excitement	Q8.1_3	0.211	0.187	1.000										
Something to play with	Q8.1_4	0.047	0.093	0.327	1.000									
Cause of discrimi-nation	Q8.1_5	-0.150	-0.139	-0.050	0.140	1.000								
Source of stigma	Q8.1_6	-0.160	-0.157	0.015	0.003	0.556	1.000							
Violates privacy	Q8.1_7	-0.068	-0.028	0.080	0.034	0.347	0.478	1.000						
Violates right of control data	Q8.1_8	-0.130	-0.113	0.032	-0.009	0.269	0.366	0.670	1.000					
Potential misuse	Q8.1_9	-0.028	-0.079	0.069	0.125	0.359	0.286	0.515	0.392	1.000				
Potential mis- interpre- tation	Q8.1_10	0.021	0.023	0.044	0.013	0.431	0.476	0.625	0.467	0.466	1.000			
Limits right of free speech	Q8.1_11	-0.246	-0.275	0.021	0.086	0.331	0.430	0.400	0.409	0.378	0.311	1.000		
Limits right of communication	Q8.1_12	-0.063	-0.056	0.017	0.036	0.256	0.338	0.504	0.446	0.305	0.410	0.545	1.000	
Limits right of information	Q8.1_13	-0.169	-0.142	0.081	0.169	0.271	0.342	0.431	0.388	0.345	0.319	0.582	0.453	1.000

Table A18: Correlations – Social costs (behaviour)

Social costs II (behaviour)		restrict- ed activities	avoided locations	defen- sive measures	made fun of it	filed com- plaint	in- formed the media	counter- sur- veillance	info about technical protection	stopped accepting vouchers
		Q8.2_1	Q8.2_2	Q8.2_3	Q8.2_4	Q8.2_5	Q8.2_6	Q8.2_7	Q8.2_8	Q8.2_9
restricted activities	Q8.2_1	1.000								
avoided locations	Q8.2_2	0.545	1.000							
defensive measures	Q8.2_3	0.355	0.379	1.000						
made fun of it	Q8.2_4	0.058	-0.012	0.206	1.000					
filed complaint	Q8.2_5	0.214	0.301	0.244	0.119	1.000				
informed the media	Q8.2_6	0.200	0.246	0.230	0.092	0.666	1.000			
counter-surveillance	Q8.2_7	0.224	0.280	0.385	0.110	0.474	0.399	1.000		
info about technical protection	Q8.2_8	0.373	0.294	0.409	0.050	0.197	0.215	0.293	1.000	
stopped accepting vouchers	Q8.2_9	0.311	0.276	0.260	0.077	0.170	0.095	0.213	0.277	1.000

Table A19: Correlations – Social costs (perceptions vs. behaviour)

Social costs III (perceptions vs behaviour)		restrict- ed activities	avoided locations	defen- sive measures	made fun of it	filed com- plaint	in- formed the media	counter- sur- veillance	info about technical protection	stopped accepting vouchers
		Q8.2_1	Q8.2_2	Q8.2_3	Q8.2_4	Q8.2_5	Q8.2_6	Q8.2_7	Q8.2_8	Q8.2_9
Protection of individual citizen	Q8.1_1	-0.271	-0.354	-0.285	-0.101	-0.240	-0.190	-0.288	-0.199	-0.292
Protection of community	Q8.1_2	-0.247	-0.316	-0.276	-0.034	-0.181	-0.156	-0.275	-0.250	-0.334
Source of excitement	Q8.1_3	0.015	-0.092	-0.010	0.028	0.067	-0.025	-0.017	-0.116	-0.052
Something to play with	Q8.1_4	0.009	-0.015	-0.100	0.049	-0.058	-0.085	-0.004	0.015	-0.004
Cause of discrimination	Q8.1_5	0.207	0.202	0.077	0.044	0.064	0.059	0.186	0.146	0.295
Source of stigma	Q8.1_6	0.232	0.187	0.080	0.074	0.048	0.072	0.118	0.210	0.243
Violates privacy	Q8.1_7	0.196	0.148	0.179	0.024	0.061	0.048	0.135	0.148	0.366
Violates right to control data	Q8.1_8	0.196	0.180	0.168	0.021	0.083	0.080	0.196	0.163	0.305
Potential misuse	Q8.1_9	0.172	0.012	0.114	0.071	0.039	0.023	0.148	0.118	0.236
Potential misinterpretation	Q8.1_10	0.196	0.097	0.090	-0.021	0.020	0.027	0.120	0.121	0.277
Limits right of free speech	Q8.1_11	0.228	0.188	0.197	0.021	0.152	0.081	0.156	0.258	0.265
Limits right of communi cation	Q8.1_12	0.197	0.171	0.108	-0.098	-0.013	0.062	0.139	0.200	0.192
Limits right of information	Q8.1_13	0.327	0.223	0.133	-0.027	0.077	0.039	0.112	0.212	0.216

Table A20: Correlations – Social benefits, usefulness and effectiveness of surveillance

			PROTECT	ΓΙΟΝ for
			individual citizen	community
			Q8.1_1	Q8.1_2
	CCTV	Q3.1_1	0.595	0.565
Usefulness for	database	Q3.1_2	0.49	0.423
REDUCTION of	SNS	Q3.1_3	0.432	0.442
crime	financialT	Q3.1_4	0.403	0.42
	geolocat.	Q3.1_5	0.476	0.435
	CCTV	Q3.2_1	0.529	0.541
Usefulness for	database	Q3.2_2	0.449	0.435
DETECTION of	SNS	Q3.2_3	0.414	0.417
crime	financialT	Q3.2_4	0.385	0.432
	geolocat.	Q3.2_5	0.471	0.427
	CCTV	Q3.3_1	0.489	0.499
Usefulness for	database	Q3.3_2	0.475	0.469
PROSECUTION	SNS	Q3.3_3	0.406	0.416
of crime	financialT	Q3.3_4	0.442	0.428
	geolocat.	Q3.3_5	0.406	0.384
	CCTV	Q5.1.1_1	0.576	0.569
	database	Q5.1.1_2	0.522	0.507
EFFECTIVENESS	SNS	Q5.1.1_3	0.452	0.439
	financialT	Q5.1.1_4	0.36	0.421
	geolocat.	Q5.1.1_5	0.448	0.427

Table A21: Correlations – Social costs and privacy in surveillance

		Surveillance measures having a negative impact on							
				privacy					
		Q5.1.2_1	Q5.1.2_2	Q5.1.2_3	Q5.1.2_4	Q5.1.2_5			
	Social costs (perceptions)	CTV	Databases	SNS	FinTrac	Geoloc.			
Q8.1_1	Protection individual citizen	-0.484	-0.406	-0.374	-0.359	-0.444			
Q8.1_2	Protection of community	-0.443	-0.355	-0.273	-0.356	-0.362			
Q8.1_3	Source of excitement	0.025	-0.051	-0.053	-0.088	-0.001			
Q8.1_4	Something to play with	0.077	-0.054	-0.032	0.035	0.015			
Q8.1_5	Cause of discrimination	0.311	0.402	0.282	0.244	0.355			
Q8.1_6	Source of stigma	0.335	0.323	0.315	0.227	0.268			
Q8.1_7	Violates privacy	0.282	0.321	0.286	0.176	0.225			
Q8.1_8	Violates right of control data	0.297	0.388	0.248	0.243	0.310			
Q8.1_9	Potential misuse	0.170	0.272	0.205	0.231	0.260			
Q8.1_10	Potential misinterpretation	0.178	0.243	0.202	0.063	0.161			
Q8.1_11	Limits right of free speech	0.306	0.307	0.319	0.224	0.244			
Q8.1_12	Limits right of communication	0.257	0.180	0.196	0.142	0.114			
Q8.1_13	Limits right of information	0.259	0.267	0.201	0.112	0.196			
	Social costs (behaviour)								
Q8.2_1	restricted activities	0.326	0.379	0.353	0.309	0.329			
Q8.2_2	avoided locations	0.359	0.366	0.288	0.275	0.333			
Q8.2_3	defensive measures	0.405	0.310	0.270	0.307	0.241			
Q8.2_4	made fun of it	0.134	0.107	0.061	0.127	0.183			
Q8.2_5	filed complaint	0.243	0.233	0.198	0.143	0.214			
Q8.2_6	informed the media	0.102	0.057	-0.003	0.106	0.031			
Q8.2_7	counter-surveillance	0.363	0.285	0.198	0.220	0.327			
Q8.2_8	info about technical protection	0.262	0.292	0.244	0.236	0.237			
Q8.2_9	stopped accepting vouchers	0.386	0.444	0.373	0.280	0.385			

Table A22: Correlations – Usefulness vs. effectiveness of surveillance

				EFFECTIVENESS against crime							
				CCTV	Database	SNS	FinancT	Geoloc.			
				Q5.1.1_1	Q5.1.1_2	Q5.1.1_3	Q5.1.1_4	Q5.1.1_5			
	7	CCTV	Q3.1_1	0.769	0.487	0.469	0.381	0.543			
	9	database	Q3.1_2	0.357	0.636	0.525	0.270	0.437			
REDUCTION	5	SNS	Q3.1_3	0.417	0.508	0.698	0.289	0.488			
	Ē	financT	Q3.1_4	0.344	0.324	0.336	0.636	0.369			
	<u>~</u>	Geoloc.	Q3.1_5	0.461	0.478	0.478	0.235	0.695			
ō	-	CCTV	Q3.2_1	0.661	0.400	0.396	0.316	0.435			
ss f	ō	database	Q3.2_2	0.439	0.593	0.501	0.351	0.571			
Usefulness for	DETECTION	SNS	Q3.2_3	0.435	0.460	0.708	0.273	0.504			
efu	Ä	financT	Q3.2_4	0.366	0.347	0.309	0.627	0.354			
Š	_	Geoloc.	Q3.2_5	0.519	0.534	0.561	0.357	0.710			
	Z	CCTV	Q3.3_1	0.617	0.389	0.425	0.369	0.411			
	Ĕ	database	Q3.3_2	0.454	0.596	0.571	0.346	0.546			
	E	SNS	Q3.3_3	0.351	0.441	0.681	0.246	0.506			
	PROSECUTION	financT	Q3.3_4	0.401	0.352	0.344	0.590	0.347			
	A	Geoloc.	Q3.3_5	0.446	0.387	0.451	0.331	0.612			

Table A23: Correlations – Security and happiness

			Feeling of	Feeling of HAPPINESS					Happiness about
			SECURITY	Q5.3_1 1.000 0.565	SNS	Database	FinancT	Geoloc.	NOT KNOWING
			Q4.3	Q5.3_1	Q5.3_2	Q5.3_3	Q5.3_4	Q5.3_5	Q5.4
Feeling of SECURITY Q4.3		Q4.3	1.000						
v s	CCTV	Q5.3_1	-0.610	1.000					
g of IES!	SNS	Q5.3_2	-0.484	0.565	1.000				
eling PIN	Database	Q5.3_3	-0.535	0.610	0.692	1.000			
Feeling of HAPPINESS	FinancT	Q5.3_4	-0.425	0.516	0.448	0.553	1.000		
_	Geoloc.	Q5.3_5	-0.555	0.669	0.620	0.621	0.461	1.000	
Happiness about NOT Q5.4 KNOWING		-0.495	0.596	0.597	0.668	0.489	0.585	1.000	

Table A24: Correlations – Impact on privacy and feelings of security, trust and control

		NEGATIVE IMPACT on PRIVACY					
		CCTV	database	SNS	financialT	geolocat.	
		Q5.1.2_1	Q5.1.2_2	Q5.1.2_3	Q5.1.2_4	Q5.1.2_5	
Feeling of security	Q4.3	-0.400	-0.320	-0.271	-0.360	-0.395	
Feeling of control I	Q4.4.1	-0.019	-0.107	-0.069	-0.079	-0.053	
Feeling of control II	Q4.4.2	-0.029	-0.016	-0.036	-0.118	-0.009	
Trust I	Q4.5.1	-0.28	-0.269	-0.204	-0.208	-0.205	
Trust II	Q4.5.2	-0.125	-0.156	-0.182	-0.158	-0.235	

Table A25: Correlations – Feelings of security, trust and control vs. effectiveness of laws

		Knowledge of laws	Effective- ness of laws	Feeling of security	Feeling of control I	Feeling of control II	Trust I	Trust II
		Q4.1	Q4.2	Q4.3	Q4.4.1	Q4.4.2	Q4.5.1	Q4.5.2
Knowledge of laws	Q4.1	1.000						
Effectiveness of laws	Q4.2	0.044	1.000					
Feeling of security	Q4.3	-0.037	0.633	1.000				
Feeling of control I	Q4.4.1	0.189	0.265	0.210	1.000			
Feeling of control II	Q4.4.2	0.121	0.263	0.170	0.467	1.000		
Trust I	Q4.5.1	0.066	0.486	0.483	0.434	0.194	1.000	
Trust II	Q4.5.2	-0.005	0.237	0.246	0.108	0.220	0.333	1.000

Table A26: Correlations – Feelings of security, trust and control vs. effectiveness of surveillance measures

		EFFECTIVENESS					
		CCTV	database	SNS	financialT	geolocat.	
		Q5.1.1_1	Q5.1.1_2	Q5.1.1_3	Q5.1.1_4	Q5.1.1_5	
Feeling of security	Q4.3	0.502	0.458	0.342	0.353	0.433	
Feeling of control I	Q4.4.1	0.078	0.112	-0.002	0.073	0.07	
Feeling of control II	Q4.4.2	0.089	0.016	-0.023	0.032	-0.041	
Trust I	Q4.5.1	0.375	0.335	0.234	0.275	0.221	
Trust II	Q4.5.2	0.306	0.208	0.177	0.19	0.243	

Appendix B – Questionnaire

Q0.1 Country of Residence

- 1. Austria
- 2. Belgium
- 3. Bulgaria
- 4. Croatia
- 5. Cyprus
- 6. Czech Republic
- 7. Denmark
- 8. Estonia
- 9. Finland
- 10. France
- 11. Germany
- 12. Greece
- 13. Hungary
- 14. Ireland
- 15. Italy
- 16. Latvia
- 17. Lithuania
- 18. Luxembourg
- 19. Malta
- 20. Netherlands
- 21. Norway
- 22. Poland
- 23. Portugal
- 24. Romania
- 25. Slovakia
- 26. Slovenia
- 27. Spain
- 28. Sweden
- 29. United Kingdom
- 30. Other _____ (please write in)

Q0.2 Age

Q0.3 Gender

1. Female

- 2. Male
- 3. Other

Q1 Have you heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?

- 1. Biometric data, e.g. analysis of fingerprints, palm prints, facial or body features
- 2. "Suspicious" behaviour, e.g. automated detection and analysis of raised voices, facial expressions, aggressive gestures
- 3. Data and traffic on the internet, e.g. Deep Packet/Content Inspection
- 4. Databases containing personal information, e.g. searching state pension databases, or customer databases of private companies
- 5. Online communication, e.g. social network analysis, monitoring of chat rooms or forums
- 6. Telecommunication, e.g. monitoring of phone calls or SMS
- 7. Electronic tagging / Radio Frequency Identification (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets
- 8. Global Positioning Systems (GPS), e.g. tracking geolocation of cars or mobile phones
- 9. CCTV cameras, e.g. in public places, airports or supermarkets
- 10. Financial information, e.g. tracking of debit/credit card transactions

From now on, in all questions, the word "surveillance" is used for the monitoring, observing or tracking of people's behaviour, activities or personal information.

Q2 What reasons for the setting up of surveillance do you know of?

- 1. The reduction of crime
- 2. The detection of crime
- 3. The prosecution of crime
- 4. Control of border-crossings
- 5. Control of crowds
- 6. Other (please write in)
- 7. I Don't know of any reasons.

Q3.1 How useful in general do you think the following types of surveillance are for the <u>reduction</u> of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q3.2 How useful in general do you think the following types of surveillances are for the $\underline{\text{detection}}$ of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q3.3 How useful in general do you think the following types of surveillance are for the <u>prosecution</u> of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q4.1 How much do you know about the laws and regulations of your country regarding the protection of your personal information gathered via surveillance measures?

1=I don't know anything about such laws and regulations, 5=I am very well informed

Q4.2 How effective do you find these laws and regulations?

1=not effective at all, 5=very effective, I don't know

Q4.3 How secure does the presence of surveillance measures make you feel?

1=very insecure, 5=very secure, I don't know

Q4.4.1 How much control do you think you have over the processing of your personal information gathered via government agencies?

1=no control, 5=full control, I don't know

Q4.4.2 How much control do you think you have over the processing of your personal information gathered via <u>private companies</u>?

1=no control, 5=full control, I don't know

Q4.5.1 How much do you trust government agencies that they protect your personal information gathered via surveillance measures?

1=no trust, 5=complete trust, I don't know

Q4.5.2 How much do you trust <u>private companies</u> that they protect your personal information gathered via surveillance measures?

1=no trust, 5=complete trust, I don't know

Q5.1.1 Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.

(1=disagree, 7=agree, I don't know)

- **Q5.1.1.1 CCTV** is an effective way to protect against crime.
- **Q5.1.1.2 Surveillance utilising databases containing personal information** is an effective way to protect against crime.
- **Q5.1.1.3 Surveillance of online social-networking** is an effective way to protect against crime.
- **Q5.1.1.4 Surveillance of financial transactions** is an effective way to protect against crime.
- **Q5.1.1.5** Geolocation surveillance using mobile phones, GPS, electronic tagging, or RFID is an effective way to protect against crime.
- **Q5.1.2** Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views. (1=disagree, 7=agree, I don't know)
- **Q5.1.2.1 CCTV** aimed at protection against crime has a negative impact on my privacy.
- **Q5.1.2.2** Surveillance utilising databases containing personal information aimed at protection against crime has a negative impact on my privacy.
- **Q5.1.2.3 Surveillance of online social-networking** aimed at protection against crime has a negative impact on my privacy.
- **Q5.1.2.4 Surveillance of financial transactions** aimed at protection against crime has a negative impact on my privacy.
- **Q5.1.2.5** Geolocation surveillance using mobile phones, GPS, electronic tagging, or RFID aimed at protection against crime has a negative impact on my privacy.

Q5.1.3 Would you be willing to accept payment as compensation for greater invasion of your privacy, using:

	Yes	No	I don't know
Surveillance via CCTV			
cameras			
Surveillance of online			
social networks			
Surveillance utilising			
databases containing			
personal information			
Surveillance of financial			
transactions			
Geolocation surveillance			
(Using mobile phones,			
GPS, electronic tagging, or			
RFID to determine the			
location of the devices and			
the devices' owners)			

Q5.2.1 Which of the following best describes you?

- 1. I never notice CCTV cameras.
- 2. I rarely notice CCTV cameras.
- 3. I sometimes notice CCTV cameras.
- 4. I often notice CCTV cameras.
- 5. I always notice CCTV cameras.
- 6. I don't know.

Q5.2.2 In your opinion, how often do the following types of surveillance take place in the country where you live?

where you live:	Never Rarely Sometimes Often Happens all I					
	happens	happens	happens	happens	the time	I don't know
Surveillance via CCTV					0.10 0.1110	
cameras						
Surveillance of online						
social networks						
Surveillance utilising						
databases containing						
personal information						
Surveillance of financial						
transactions						
Geolocation surveillance						
(Using mobile phones,						
GPS, electronic tagging,						
or RFID)						

Q5.3 How happy or unhappy do you feel about the following types of surveillance?

	Very happy	Нарру	Neither happy nor unhappy	Unhappy	Very unhappy	I don't know
CCTV cameras						
Surveillance of online						
social networks						
Surveillance utilising						
databases containing						
personal information						
Surveillance of financial						
transactions						
Geolocation surveillance						
(Using mobile phones,						
GPS, electronic tagging,						
or RFID)						

Q5.4 Surveillance may take place without people knowing about it. How do you feel about this?

- 1. I feel very happy about this.
- 2. I feel happy about this.
- 3. I feel neither happy nor unhappy about this.
- 4. I feel unhappy about this.
- 5. I feel very unhappy about this.
- 6. I don't know.

Q6.1 In which of the following locations or events would you find the different types of surveillance for fighting crime acceptable?

		Geolocation surveillance		
		(Using mobile phones,		
	CCTV	GPS, electronic tagging,		
		or RFID to determine the		
		location of the devices		
		and the devices' owners)		
Public services (e.g. local council offices)	☐ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Private companies (e.g. banks)	☐ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Workplace	☐ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Schools / universities	☐ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Clinics and hospitals	□ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Airports	☐ Acceptable	☐ Acceptable		
	☐ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Public transport	☐ Acceptable	☐ Acceptable		
(Railway, subway, buses, taxis etc.)	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
City centres	☐ Acceptable	☐ Acceptable		
	☐ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Specific areas that experience increased crime	☐ Acceptable	☐ Acceptable		
rates	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Urban spaces in general	☐ Acceptable	☐ Acceptable		
	☐ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
Mass events (concerts, football games etc.)	☐ Acceptable	☐ Acceptable		
	☐ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		
The street/neighbourhood where I live	☐ Acceptable	☐ Acceptable		
	□ Unacceptable	☐ Unacceptable		
	☐ I don't know	☐ I don't know		

Q6.2 In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country

(1=far too little, 2= too little, 3=just right, 4=too much, 5=far too much, 9=I don't know)

Q7.1 Please indicate the extent to which you believe the following practices of government agencies for fighting crime are acceptable or not acceptable.

You may choose more than one option if applicable.

	Fully accept- able in all circum- stances	Acceptable only if the citizen is suspected of wrong- doing	Acceptable if the citizen is suspected of wrong- doing and the surveillance is legally authorised	Acceptable if the citizen is informed	Acceptable if the citizen has given consent	Not acceptable in any circum- stances	l don't know
Government							
agencies share							
a citizen's							
personal							
information gathered via							
surveillance							
measures with							
other							
government							
agencies							
Government							
agencies share							
a citizen's							
personal							
information							
gathered via							
surveillance							
measures with							
foreign governments							
Government							
agencies share							
a citizen's							
personal							
information							
gathered via							
surveillance							
measures with							
private							
companies							

Q7.2 Please indicate the extent to which you believe the following practices of <u>private companies</u> for fighting crime are acceptable or not acceptable.

You may choose more than one option if applicable.

	Fully accept- able in all circum- stances	Acceptable only if the citizen is suspected of wrong- doing	Acceptable if the citizen is suspected of wrong- doing and the surveillance is legally authorised	Acceptable if the citizen is informed	Acceptable if the citizen has given consent	Not acceptable in any circum- stances	l don't know
Private							
companies							
share a citizen's							
personal							
information							
gathered via							
surveillance							
measures with							
government							
agencies							
Private .							
companies							
share a citizen's							
personal information							
gathered via							
surveillance							
measures with							
foreign							
governments							
Private							
companies							
share a citizen's							
personal							
information							
gathered via							
surveillance							
measures with							
other private							
companies							

- **Q8.1** Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.
- (1=disagree, 7=agree, I don't know)
- Q8.1.1 Surveillance provides protection for the individual citizen.
- Q8.1.2 Surveillance provides protection of the community.
- Q8.1.3 Surveillance can be a source of personal excitement.
- Q8.1.4 Surveillance can be something to play with.
- Q8.1.5 Surveillance may cause discrimination towards specific groups of society.
- Q8.1.6 Surveillance may be a source of stigma.
- Q8.1.7 Surveillance may violate a person's privacy.
- Q8.1.8 Surveillance may violate citizens' right to control whether information about them is used.
- Q8.1.9 There is a potential that information gathered via surveillance could be intentionally misused by those who collect or process the data.
- Q8.1.10 There is a potential that information gathered via surveillance could be misinterpreted by those who collect or process the data.
- Q8.1.11 Surveillance may limit a citizen's right of expression and free speech.
- Q8.1.12 Surveillance may limit a citizen's right of communication.
- Q8.1.13 Surveillance may limit a citizen's right of information.
- **Q8.2** To what extent has your awareness of surveillance changed your personal behaviour? Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.

(1=disagree, 7=agree, I don't know)

- Q8.2.1 I have restricted my activities or the way I behave.
- Q8.2.2 I have avoided locations or activities where I suspect surveillance is taking place.
- Q8.2.3 I have taken defensive measures such has hiding my face, faking my data, or incapacitating the surveillance device.
- Q8.2.4 I have made fun of it.
- Q8.2.5 I have filed a complaint with the respective authorities.
- Q8.2.6 I have informed the media.
- Q8.2.7 I have promoted or participated in collective actions of counter-surveillance, such as using mobile phones to document the behaviour of police and security forces.
- Q8.2.8 I have kept myself informed about technical possibilities to protect my personal data.
- Q8.2.9 I have stopped accepting discounts or vouchers if they are in exchange for my personal data.

Q9 Demographics

This section relates to information about you. It may be left blank but it would greatly assist our research if you do complete it. If you do not wish to answer these questions please click on the "SUBMIT" button at the bottom of the screen. Thank you.

Q9.1 What is your highest level of education?

- 1. No formal schooling
- 2. Primary school
- 3. Secondary school/High School
- 4. Tertiary education (University, Technical College, etc.)
- 5. Post-graduate

Q9.2 Would you say you live in an area with increased security risks?

- 1. Yes
- 2. No
- 3. Not sure/don't know

Q9.3 How often do you usually travel abroad per year?

- 1. Up to once a year
- 2. 2-5 times a year
- 3. 6-10 times a year
- 4. More than 10 times a year

Q9.4 How often do you usually visit a mass event (concert, sports event, exhibition/fair etc.) per year?

- 1. Up to once a year
- 2. 2-5 times a year
- 3. 6-10 times a year
- 4. More than 10 times a year

Q9.5 If you make use of the internet, for which purposes do you use it:

- 1. To communicate (e.g. by email)
- 2. Social networking
- 3. Online shopping
- 4. Information search
- 5. Internet banking
- 6. E-government services
- 7. I don't use the internet