

American University of Armenia

**Security Cameras
&
The Right to Personal Data Protection in Armenia**

**A master's thesis submitted to the faculty of Political Science and
International Affairs Program for the fulfillment of degree of Master
of Arts**

Nayiri Shorjian

Supervisor: Dr. V. Ter-Matevosyan

Yerevan 2016

Acknowledgements

First and foremost, I would like to thank my advisor, Dr. Vahram Ter-Matevosyan, for his interesting courses, invaluable feedback, guidance, patience, and flexibility. Also, to Dr. Arpie Balian, for her support throughout my two-year journey at the American University of Armenia.

To AUA, thank you for giving me hope and vision.

I would like to thank my course mate and friend, Gegham, for helping me with the translations and with SPSS.

A special thanks goes to my husband, Varak, for his endless support in pursuing my goals and supporting me during my minor and major confidence crises.

I would also like to thank my parents for making education a priority in my life.

Finally, a huge thank you goes to all those who stood by my side in different ways, including those who pampered me with coffee and chocolate, throughout one of the most stressful times of my life.

| | |
|---|-----------|
| Introduction | 4 |
| What is Surveillance? | 5 |
| Legal Framework of Surveillance and the Right to Personal Data Protection..... | 7 |
| Literature Review | 9 |
| Effectiveness of CCTV Cameras..... | 9 |
| Surveillance, CCTV Cameras, and Privacy | 13 |
| Realities in Armenia..... | 15 |
| Background and Context of Street Cameras | 15 |
| Legal Framework | 15 |
| Research Questions and Hypotheses | 16 |
| Methodology..... | 17 |
| Data Analysis and Discussion | 19 |
| Survey Analysis and Discussion | 19 |
| Content Analysis and Discussion | 23 |
| Findings..... | 26 |
| Conclusion | 28 |
| References..... | 29 |
| Appendix..... | 31 |

Introduction

The debate between the effectiveness and the ineffectiveness of Closed Circuit Television Camera surveillance has recently become an important topic. More public and private authorities have been resorting to surveillance cameras as a means of maximizing their security. A wide range of crimes such as thefts, robberies, and even terror attacks have been caught on surveillance cameras. That entailed that they can be beneficial for the collective security of a community.

And yet, in many other cases surveillance cameras failed to serve their purpose mainly due to technical limitations or other constraints. Additionally, surveillance through CCTV cameras may limit fundamental human rights, such as the right to freedom of expression and personal privacy. Arguably, freedom and privacy may have different understanding in different cultures. Thus, the extent of violation of such human rights might not be perceived in a similar way in all cultures. Moreover, these violations can be to a certain extent tolerable in some cultures more than others.

The focus of this study is the public perception towards surveillance cameras, which are considered either as security maximizing measures or as possible means of violation of personal privacy in Armenia.

The RA law on Personal Data Protection is a relatively new one, which has been adopted in June 2015 by the government. The importance of this law besides its obvious benefits also lies in the creation of a new culture towards respecting personal data. Due to the absence of a law in Armenia that would regulate the personal data protection for a long period of time, it would be reasonable to assume that there was little or no concern over the right to personal data protection.

The purpose of this study is to show the extent to which the people in Yerevan, the capital of Armenia, are concerned about their personal privacy and

personal data protection vis-a-vis the surveillance cameras. Additionally, the study aims to assess the extent to which people feel safe around security cameras. The study also tries to show the risks and benefits of security cameras taking into account the local legal framework, and the uses of data collected by surveillance cameras in the country.

What is Surveillance?

Dictionary definitions of the word “surveillance” range from “the act of carefully watching someone or something especially in order to prevent or detect a crime” (“Surveillance | Definition of Surveillance by Merriam-Webster” 2016) to the act of watching “especially by the police or the army” which specifies by whom it is practiced (“Surveillance Meaning in the Cambridge English Dictionary” 2016). Other definitions stress on the individual under surveillance “close observation, especially of a suspected spy or criminal” (“Surveillance - Definition of Surveillance in English from the Oxford Dictionary” 2016).

The literature on the understanding of the concept of surveillance does not necessarily focus on crime and provides a simple definition of the word: “Surveillance is, quite simply, observations conducted to gain information” (Baker and Gunter 2008, 1). A more precise yet simple definition is “Surveillance is defined as including: monitoring, observing, listening to persons, their movements, their conversations or their other activities or recording anything monitored, observed or listened to in the course of surveillance, and surveillance by or with the assistance of a surveillance device.” (“Surveillance Policy and Procedures” 2015, 4).

The present study takes into consideration observation through Closed Circuit Television cameras on public spaces conducted by either public or private authorities assumingly for the purpose of preventing and reducing security threats as well as resolving security issues (crime investigation).

According to the “Surveillance Guide” drafted by the Ministry of Justice of the Republic of Armenia, Personal Data Protection Department, an individual’s photo is a personal data that allows for a direct or indirect identification of the individual (“Surveillance Guide” 2016). This line of thinking justifies that surveillance conducted by cameras is a way of processing personal data, since it is possible to identify a person based on their appearance in the footage. Moreover, surveillance cameras, which assumingly aim at preventing, reducing, or detecting crimes, will potentially be used for identifying people in case of criminal activities.

Throughout history, authorities, as well as common people, have resorted to different forms of surveillance for security reasons or otherwise. With the advancement of technology, data collection has become easier and currently many forms of surveillance exist. The scope of the present research extends the simplified operationalization of the word “surveillance”, to include personal data collected by both governmental bodies and private corporations in public spaces through the use of CCTV security cameras.

Besides the different methods of collecting data through observation, there are two types of surveillance: overt surveillance and covert surveillance. The major difference between them lies in the issue of consent given by the individuals being subject to surveillance. While overt surveillance is not directed to a specific individual and is conducted essentially with prior consent and/or announcement, covert surveillance targets specific individuals who are not aware that they are under

surveillance (“Surveillance Policy and Procedures” 2015; Baker and Gunter 2008). It is important to note that each of the two types of surveillance is guided by separate set of laws and codes of practice. The documents discussed in this research refer to the overt surveillance, unless it is specified otherwise.

Legal Framework of Surveillance and the Right to Personal Data Protection

The Universal Declaration of Human Rights adopted by the United Nations in 1948 is considered to be the building block of all other international treaties, conventions, and laws pertaining human rights. Beside other fundamental rights, the Universal Declaration of Human Rights prohibits the arbitrary interference into one’s privacy, family, home or correspondence, and the attack on one’s honor and reputation (“The Universal Declaration of Human Rights United Nations” 1948, Article 12). Furthermore, as stated by Article 12 of the Declaration, “everyone has the right to the protection of the law against such interference or attacks”.

The European Convention on Human Rights is the reference point from which the right to personal data protection has been developed in several countries. The convention, signed on the 4th of November 1950 in Rome and put in force two years later elaborates on the right to respect for private life. Private life can only be interfered by public authorities in case of the presence of threats on national security, economic wellbeing of the country, prevention of crimes, etc. (“European Convention on Human Rights” 1950 Article 8).

The European Convention on Human Rights has catalyzed the regulation of surveillance by the police in many European countries, such that it protects, to a certain extent, the right to privacy (N. Taylor 2002; Gras 2004). The most classical

Act that has been dedicated to the personal data protection of individuals is the Data Protection Act of 1998 of the United Kingdom. Equivalents of this act are adopted in many countries across the world. Within the framework of this study, The Data Protection Act of 1998 stresses three important focuses: Rights of data subjects, notification by data controllers, and exemptions.

In general, personal data obtained from surveillance devices are protected through two types of regulations:

- a) Laws that regulate the use of these devices such that they minimize privacy costs.
- b) Laws that are directed towards protecting an individual's right to personal data protection, that is after the data has been processed.

These two types of regulations include sets of laws and codes of practices that guide the practice of each.

Laws that aim at protecting personal data address four key elements (“In the Picture: A Data Protection Code of Practice for Surveillance Cameras and Personal Information” 2015; “Conducting Privacy Impact Assessments Code of Practice” 2014; “Data Protection Act 1998” 1998):

- a) Data collection
- b) Use of data
- c) Storage of data
- d) Disclosure of data

This corresponds to the key areas that are covered by the laws that guide the practice of surveillance (“In the Picture: A Data Protection Code of Practice for Surveillance Cameras and Personal Information” 2015; “Surveillance Camera Code of Practice” 2013). Documents that regulate the installment, use, storage and sharing

of information gathered through surveillance devices, including the Closed Circuit Television cameras, first and foremost insist that surveillance should be implemented only if it is to serve a specific legitimate purpose that should be decided prior to the installation of surveillance devices (“Surveillance Camera Code of Practice” 2013; “In the Picture: A Data Protection Code of Practice for Surveillance Cameras and Personal Information” 2015). Moreover, surveillance should be conducted only if there is a pressing need for surveillance and if surveillance is the best alternative addressing the need, taking into consideration the risks it imposes on those who are subject to it. Legitimate aims that reflect a pressing need include but are not restricted to national security, public safety, economic wellbeing, prevention, detection and investigation of crimes, and protection of morals, rights, and freedoms (“Surveillance Camera Code of Practice” 2013).

Literature Review

Effectiveness of CCTV Cameras

The immediate purpose of installation of CCTV cameras is surveillance, however, the effectiveness of the broader aims that can be summed up as maximization of collective public security, have been both praised and questioned by scholars and policy makers. Reduction of crimes, such as vandalism, robbery, theft, false injury, and assaults are the general achievements that can be realized through surveillance technologies (Nieto 1997; Obermeyer 2007; Bannister and Fyfe 1996). Moreover, deterrence of crimes, as well as early interventions to disguise deviant behaviors and criminal activities are considered to be legitimate aims of surveillance that can be attained through the installation of CCTV cameras (Bannister and Fyfe 1996; S. J. Taylor 2005).

In arguing for the potential effectiveness of state surveillance, scholars stress the contribution of surveillance to justice in the community either through facilitating the identification of criminals and discovery of crime details or through deterring crimes. There is an immense literature on the effectiveness of CCTV cameras in the courts not only as credible evidence, but also as a means of preventing corruption in the hands of investigators and judges. Surveillance tools supplant witnesses and exceed humans in power and capacity, taking into consideration their accuracy and lack of biases in the court (S. J. Taylor 2005; Schwartz 2013). As a result, wrongful conviction incidents in the court can be minimized. Surveillance is often argued to be a tool for empowering the government and increasing its administrative capacity to regulate civil society (Schwartz 2013; Bannister and Fyfe 1996). Within the framework of its contribution to justice, CCTV cameras cut off the alternative of conducting private investigation usually initiated by the rich and possibly serving the interests of the initiator or in charge of the investigation (S. J. Taylor 2005).

On the other hand, numerous literature on the effectiveness of CCTV cameras questions the theoretical link between surveillance and crime rates. The skepticism towards the effectiveness of CCTV cameras has given scholars the privilege to draw an analogy between government surveillance and George Orwell's *Big Brother* (S. J. Taylor 2005; Cohen 2008; Bannister and Fyfe 1996; Obermeyer 2007; N. Taylor 2002). Other terms with a highly negative connotation, such as "Geoslavery" have also come to existence to describe surveillance conducted by both government bodies and private corporations (Obermeyer 2007). The term "Geoslavery" refers to the use of geographical space to track down the movements as well as the behaviors of the people. The existence of such analogies is partly based on either the failure of CCTV cameras to serve the purpose of reducing crimes and increasing public security or the

failure of the governments to provide enough evidences for the effectiveness of surveillance. This shows that, the consequences of surveillance on human rights have been the focus of many studies pinpointing the ineffectiveness or the exaggerated benefits of surveillance.

Groombridge (2002), who has extensively published on the issue, states that researches within the framework of the effectiveness of CCTV are usually conducted to praise its effectiveness. The author also calls to the attention of the public the methodological weaknesses of evaluations conducted to explore the effectiveness of security cameras. Along these lines, Bergin (2013) argues that CCTVs cameras are generally ineffective unless they are constantly monitored and crimes or any other deviant behaviors are registered on time.

Numerous studies reflect on failures and many independent scholars have focused their studies on the ineffectiveness of CCTV cameras in deterring and reducing crimes. Several authors have found enough evidence to show that the benefits of CCTV cameras are overstated (Schwartz 2013; Posner 2008; Bannister and Fyfe 1996; N. Taylor 2002). In this context, it is often argued that surveillance devices sometimes are so poor in quality that they produce many false positives, thus inefficiently replacing human witnesses in the court and failing to be considered as credible evidence in crime investigations. This argument is stressed by Posner (2008) who adds that surveillance cameras sometimes are used as a blackmailing tool to exert pressure on people by those who have access to the images collected through CCTV cameras and which may potentially used in the court.

Numerous Many articles have been published criticizing the technical limitations of security cameras and their failure to serve the purpose of maximizing security. Carter points out (2014) that many of the footages released by the police

look like 1998 webcam footages and are so blurry that hinders the detection of essential details. This is an important limitations because, as stated by Carter (2014), it impedes enforcement of laws related to crime or personal data protection. Additionally, low quality images are rejected in the court (Keval 2009). Moreover, the failure of CCTV footages in displaying details helps only in monitoring and discovering the way a crime has been done, which does not lead to the detection of the criminals (Ayub 2015). Keval (2009) also argues that low quality images fail to display scars, bruises, and other physical harms received by the victim. In any case, low quality images are not particularly helpful to the police to conduct proper investigation of unknown suspects.

In addition, surveillance cameras, such as the CCTV, in fact, do not reduce crime, but move crime to other areas and regions. In this regard, Ditton & Short (1998), in their evaluation of CCTV cameras in Scotland, have found no evidence of displacement of crimes from areas that are subject to surveillance by CCTV cameras to other areas. However, the authors claim that CCTV cameras have some influence on the nature of crimes, since they have reported differences in crime culture between CCTV controlled areas and those that are free from surveillance cameras. Bannister and Fyfe (1996), who have a highly critical approach towards CCTV evaluations, argue that these researches are conducted only on crimes that are reported to the police, which means that the reported conclusions cannot be taken at face value.

Authors who question the effectiveness of CCTV cameras make a distinction among the types of crimes that are reduced by surveillance through these cameras. Posner (2008) and Schwartz (2013), for instance, conclude that CCTV cameras reduce crime only in limited circumstances such as property crime. Obermeyer (2007) finds little or no evidence that shows that government surveillance through

technological devices reduces or prevents terrorism. Anthony Bergin (2013), in his article “Boston tells us not to be blind on CCTV’s uses” mentioned that opponents to CCTV camera point out that these cameras are effective only in limited cases such as targeting traffic offenders, car thieves, and disorderly behavior at shopping centers.

Surveillance, CCTV Cameras, and Privacy

State surveillance has two simultaneous faces; one that infringes privacy and human rights, and one that maintains and ensures security (Newburn and Heyman 2001; Lyon 1994). This argument has two important implications: the first one is that it reflects an ongoing debate about the trade-off or the balance between human rights and security, and secondly, it pinpoints that intrusion to privacy is the greatest of all human rights threats imposed by surveillance. This part of the existing literature deals with the second implication, as it is less theoretical and is directly relevant to policy-making.

Data Protection Act of 1998, Protection of Freedoms Act of 2012, Privacy Impact Assessment and Risk Management, Privacy Impact Assessment Code of Practice, Privacy Notices Codes of Practice, Code of Data Sharing, Freedom of Information Act of 2000, Human Rights Act of 1998, and a few other documents serving similar purposes have been created (or amended) post-hoc surveillance, especially by CCTV cameras, to address the needs of those who are subject to the threats of surveillance. The above-mentioned documents, which have been adopted in the UK based on international standards, reflect that surveillance has often been discussed through the lens of morality as it guarantees a moral value such as security and at the same time breaches another moral value, which is privacy - a phenomenon that has dominated the discourse on the civil liberty threats imposed by CCTV

cameras (Obermeyer 2007; Bannister and Fyfe 1996; S. J. Taylor 2005; Schwartz 2013; N. Taylor 2002).

It can be argued that interests in privacy protection can restrict the effectiveness of surveillance by the government (Cohen 2008; N. Taylor 2002). In addition, in the age of informational technology, it is challenging to draw a clear line between what is private and what is public as both concepts are widely contested among scholars and common people (Kumar and Makarova 2008). However, as stated by Dobson and Fisher (2006) “benefits do not negate risks”, and privacy protection requires as much importance as is given to surveillance for security purposes. A firm believer in the benefits of government surveillance, J. S. Taylor (2005), who is outstanding in the existing literature as a proponent of collective benefits rather than personal rights, makes several references to the risks imposed by surveillance on personal privacy. Obermeyer (2007) argues that personal privacy can be put in a greater risk, as the digital storage of data becomes less costly. The fact that our actions are exposed to public gaze, and are recorded and collected into a permanent record of behavior over a particular period reflects an infringement of personal privacy (N. Taylor 2002).

A great deal of ink can be spent on convincing the other side the importance of personal privacy over public security and the other way round. Moreover, the existing literature is quite rich in this debate, which is discussed through all the dimensions possible. However, there is little or no literature on the cultural implications of the trade-off or balance between privacy and public security particularly when surveillance devices are involved. Taking into consideration the issues discussed in the literature, the present research aims at exploring a few of dimensions of surveillance in Yerevan, the capital of Armenia, where recently a noticeable number

of cameras have been installed with the provision of further expansion, albeit in the absence of regulations that target the proper use of surveillance devices. The present research considers the attitudes of the people, particularly the legal experts as crucial in policy making.

Realities in Armenia

Background and Context of Street Cameras

Yerevan is the capital of Armenia with a population of approximately 1.2 million as of 2016. The governmental bodies including all the ministries, the headquarters of the banks, international organizations, non-profit organizations, foundations, as well as legal and juridical bodies are all located in Yerevan.

In early January 2012, it was announced that speed as well as CCTV cameras installed across Yerevan would start operating as of January 16 of the same year. The announcement came with the provision of further expansion of the cameras across the city for the purpose of ensuring public safety especially in the sphere of public and private transportation. In 2015, a further expansion of traffic camera installation raised the number of cameras operating in the city to 117 (“Norutyunner - Hayastani Hanrapetutyun Vostikanutyun” 2016). However, it is important to note that the center of the city has the highest concentration of cameras.

Legal Framework

The traffic cameras (both speed cameras and CCTV) operate based on a procedure in cooperation with the Police department, which is the only governmental body that can have on the spot access to the information recorded. Other parties, such as the citizens or lawyers, if justified, can have access to the captured images or

footages through the police by directly contacting them or by accessing to the police.am website, which has a special sections on traffic violations.

Besides traffic laws, there exists no written rules or codes of practice that regulate the installation, use, access, and storage of the information gathered by the cameras (“Zhepta, Mez Nkarum en. Ov e Tesahskum Mez Erevanum - Mediamax.am” 2016). However, two laws that touch upon the operation and use of surveillance devices are The Law on Operative and Search Activities, and The Law on Personal Data Protection, which has been in force since July 2015. Ministry of justice is currently in the process of drafting a “Surveillance Guide” that aims at regulating the installation and the use of surveillance devices. Moreover, according to a legal expert in the Personal Data Protection Department of the Ministry of Justice of the Republic of Armenia, the department receives notifications by private corporations who are willing to process personal data that based on the Personal Data Protection Law qualify for either of the two categories of personal data: a) biometric b) special category.

Research Questions and Hypotheses

The assumptions tested in this study are drawn from observation, life experiences and the literature review. Three research questions with their subsequent two hypotheses were developed, in order to test these assumptions. The research questions addressed in this study are:

RQ1: To what extent do the citizens of Armenia perceive surveillance through CCTV cameras as violation of the right to personal data protection?

RQ2: To what extent do the citizens of Armenia feel secure by the presence of CCTV cameras?

RQ3: What are the risks and benefits of CCTV cameras in Armenia?

The hypotheses of the research are:

H1: The right to personal data protection vis-à-vis security cameras is not a concern for the citizens of Armenia.

H2: The citizens of Armenia feel secure under CCTV surveillance.

Methodology

The present study uses a mixed method convergent parallel research design that combines both qualitative and quantitative data collection employing an explanatory design. Data collection comprised survey and in-depth interviews. Qualitative and quantitative data analysis were conducted simultaneously.

The first and the second research questions were answered using both the qualitative and quantitative data analysis. As for the second research question, quantitative analysis of the primary data collected through survey was sufficient. Whereas, the third research question was answered by content analysis of the interviews only.

The survey was conducted in Yerevan, where security cameras have the highest concentration compared to other regions in Armenia. The survey aimed at measuring the personal attitudes towards surveillance conducted by the government and by the private corporations, as well as the concerns over the protection of personal data vis-à-vis surveillance.

Data Collection Instruments and Sampling

The survey questionnaire was developed in English and translated into Eastern Armenian, which is the native language of the respondents. The questionnaire was

based on the literature review, as well as similar surveys conducted in the United States, but it has been adapted to the local cultural context to minimize misunderstandings, ambiguity, and bias. Likert Scale was used in the survey. The survey questionnaire was tested with twelve graduate students of different departments at the American University of Armenia. The testing of the survey questionnaire was helpful in improving the questionnaire and eliminating the ambiguities.

The survey was conducted both online using e-mails and social media, and by distributing the survey in person in different neighborhoods in Yerevan. Social media enabled the researcher to attract the younger generation, which is most active on social media. In order not to restrict the sample to only those who are active on social media, paper-based survey was also conducted.

Convenient sampling strategy was used in the research and the number of respondents was 172. 104 of the responses were received through social media and emails. The purpose of the survey was to explore the attitude of the public with respect to surveillance and personal data protection, including privacy. Thus, personal information, such as employment status, level of education, and marital status were not taken into consideration in the survey. SPSS statistical software was used to analyze the primary data collected through survey. Data analysis relied on descriptive analysis.

The research used purposive sampling for the interviewees. Five human rights lawyers and five lawyers, who deal with criminal cases where security camera footages are potentially used, were interviewed. One of the interviewees represents the Personal Data Protection Department of the Republic of Armenia Ministry of Justice. In order to reduce bias on the side of the researcher, the content analysis of

interviews was conducted using codes and descriptors derived from the literature review.

Intensity was used for the measurement of each descriptor. The intensity of each descriptor was measured based on its frequency of reference and ordering by the interviewees. The scale of measurement used throughout the analysis was pre-established by the researcher and was used consistently.

Data Analysis and Discussion

Survey Analysis and Discussion

The SPSS analysis of the primary data collected through survey was used to test the first and the second hypothesis of this research. The assumptions underlying each statement in the survey questionnaire were driven from similar surveys conducted in the United States, as well as personal observations and life experiences of the researcher. The pattern across the assumptions was that people would prioritize collective security over personal rights. This line of thinking suggests that the citizens may not perceive their right to personal data as being violated by surveillance. Also, people would accept any security enhancing measure, including installment of CCTV cameras in their community. The data analysis of the survey pertaining the first hypothesis revealed the following presented in the form of a table with the corresponding percentages:

| N | Variables | Negative | Neutral | Positive |
|----------|---|-----------------|----------------|-----------------|
| 1 | I prefer shopping in stores that are under camera surveillance | 30.2 | 16.3 | 53.5 |
| 2 | I prefer my children to hang out in places that are under camera surveillance | 13.9 | 15.1 | 70.9 |
| 3 | The government should expand the budget allocated to security cameras | 30.2 | 17.4 | 52.2 |
| 4 | Footages are more reliable evidences in the court than human witnesses | 14.0 | 19.8 | 66.3 |

Table 1 Do people feel secure around security cameras?

Table 1 displays the variables that indicate the extent to which people feel secure by the existence of security cameras in their environment. This reveals that the balance between personal rights and security tilts towards collective security. The four variables that measure the sense of feeling secure by being in areas targeted by surveillance have similar pattern of responses. This shows that security cameras, in general, provide people with a sense of security.

However, slight differences among the percentages are detected, which reflect that security cameras are most favorable when the security of the children is involved (70.9 % positive). Although the respondents have displayed agreement towards the budget expansion of the government with respect to security cameras, this variable is the least favored among the four (52.2 % positive). This attitude could be explained by the fragile trust relationship between the people and the government.

Respondents also show preference towards shopping in stores that are under surveillance by cameras (53.5 % positive). Even though more than half of the respondents agree on the proceeding statement, the results are not as high as were initially expected by the researcher. This can be explained by the fact that a few scandals regarding CCTV cameras have occurred in Yerevan, which could be still fresh in the memory of the respondents. Finally, the majority of respondents agree

that evidence in the form of footages captured by security cameras is more reliable than human witnesses (66.3 % positive).

The survey also records the public attitude towards the importance of the right to personal data specifically vis-à-vis surveillance through security cameras. The data analysis of this part tests the second hypothesis. The results revealed the following:

| N | Variables | Negative | Neutral | Positive |
|----------|--|-----------------|----------------|-----------------|
| 1 | Footages in which I have appeared should not be accessed by anyone, even in cases of crime. | 51.1 | 14.0 | 34.9 |
| 2 | I don't mind sharing my personal data with the police, if that helps in detecting crimes. | 62.8 | 8.1 | 29.1 |
| 3 | I don't mind sharing my personal data with private corporations if that contributes to their security. | 31.4 | 7.0 | 61.6 |
| 4 | Providing my consent for being captured by cameras is not essential for me | 52.5 | 19.8 | 27.9 |
| 5 | If my personal data protection is violated, I will make sure it does not happen again. | 48.9 | 11.6 | 39.5 |
| 6 | If my personal data protection is violated, I will immediately demand compensation. | 13.9 | 16.3 | 69.8 |

Table 2 Are people concerned with their right to personal data protection?

Table 2 indicates that there is a general concern over the right to personal data protection. However, when security threats, such as crime, are concerned, more than half of the respondents do not agree that their personal data should not be accessible (51% negative). This is in harmony with the researcher's assumption of the people's concern over collective security at the cost of sacrificing their personal rights.

The data analysis also indicates that the majority of the respondents do not agree to share their personal data with the police even if it helps in detection of criminals (62.8 % negative). The situation is different when the respondents were

asked whether they agree to share their personal data with private corporations. In this case 61.6% of the respondents agree to sacrifice their personal data protection for the sake of the security of private corporations. Although it is not in the immediate scope of the research, the above-mentioned attitudes reflect a certain level of mistrust towards the police. This can also explain why only 51% of the respondents agreed on giving up their right to personal data in favor of detecting crimes and preventing other security threats. Had the trust towards the police not been a confounding variable, the positive results might have been higher.

Moreover, respondents do not agree that consent is not essential in case of surveillance (52.5% negative). Data analysis also shows that the percentage of demanding immediate compensation for the damage caused by violation of personal data protection right is much higher (69.8 %) than the percentage agreeing on making sure it is not repeated (39.5). In other words, regardless of the public's awareness of the existence of the Personal Data Protection Law, the public attitude leans towards demanding immediate compensation than making sure the violation of personal data protection right is not repeated.

The survey results presented above reveal that in general, Armenians value collective security more than their personal rights, especially when children are involved. The results also show that security cameras contribute to the people's sense of feeling secure. This is in line with the last variable displayed in table 1, which compares the trust of people towards footages and human witnesses in the court. The data analysis revealed that footages taken from security cameras are trustworthy more than human memory. Despite the history of mistrust between the two parties, the respondents have agreed on budget expansion by the government in order to increase the number of cameras installed.

The data analysis of the survey, besides testing the hypothesis, reveals another phenomenon. A huge discrepancy over corner over personal data was detected between two cases: the case of sharing it with the police and the case of providing it to the private corporations. Responses revealed that people tend to trust the private corporations more than the police with their personal data. In general, people show positive attitude towards sacrificing their data protection right to maximize collective security. However, the attitude changes when the receiving end of the personal data is the police, even when the police needs these data to detect criminals who are threats to security of the community.

Demand of the respondents for consent in case of processing their personal data through surveillance reveals the concern of the respondents over personal data protection. Moreover, the preference of the respondents of immediate compensation for the damages caused by the violation of the right to personal data protection over simply making sure that the violation is not repeated confirms the above discussed thread of valuing the right to personal data protection.

Content Analysis and Discussion

In order to properly address the first research question and to be able to answer the third research question posed in this study, content analysis of in-depth interviews with ten lawyers was done. Given that the topic of this study discusses two broad themes: human rights and collective security, the interviewees were lawyers working in either of these two spheres.

The content analysis of the in-depth interviews with lawyers enriched the discussion of the answer to the first research question, which aims at exploring the extent to which people are concerned with protecting their right to personal data

protection. The fact that the selected lawyers work closely with citizens in these issues helped the researcher examine the extent of this concern.

All interviewees, except one, mentioned that there has not been any case in Armenia so far in which a citizen has appealed to the court for personal data protection (intensity=0). There have been a few cases where people have demanded for erasure of personal data, but all of these cases have revolved around crime (intensity=1). That is, only in case of footages detecting crime, people have demanded for the erasure of their or their family member's images. Content analysis of interviews also showed that the demand for compensation of the damage cause by the violation of personal data protection is relatively high (intensity=3.5), however the financial as well as the non-material compensations in Armenia too little that it discourages people from protecting their rights. Table 3 discusses the results of the content analysis of the first research question.

| N | RQ1 Descriptors | Frequency | Intensity |
|-----------|-------------------------------------|------------------|------------------|
| 1. | Appeal to the court | 1 | 0 |
| 2. | Demand for erasure of personal data | 2 | 1 |
| 3. | Demand for compensation for damage | 7 | 3.5 |
| 4. | Demand for consent | 6 | 3 |

Table 3 To what extent is the right to persona data protection a concern?

The third research question has two variables: risks and benefits of CCTV surveillance in a community. The descriptors of this research question were derived directly from the literature discussed. Table 4 indicates the results of the content analysis of the risks imposed by CCTV surveillance.

The analysis reveals that violation of personal privacy is the most frequent and the most common risk imposed by both government and private surveillance through CCTV cameras in Yerevan (intensity=5). However, defamation, in terms of violating people's right to honor and hurting their reputation is the second most common issue that is created by CCTV cameras (intensity=4). Blackmailing through footages captured, especially in the case of public figures, is another disadvantage of surveillance (intensity 3.5). Use, disclosure, enabling access to and sharing personal data for purposes other than the ones for which surveillance is being conducted, as well as fabrication of images is considered misuse of data. In Armenia, misuse is relatively rare with an intensity of 2. Table 4 displays the content analysis of the risks imposed by CCTV surveillance.

| N | RQ 3 descriptors | Frequency | Intensity |
|-----------|-------------------------|------------------|------------------|
| 1. | Violation of privacy | 10 | 5 |
| 2. | Defamation | 8 | 4 |
| 3. | Blackmailing | 7 | 3.5 |
| 4. | Misuse | 4 | 2 |

Table 4 The risks imposed by CCTV surveillance.

The second variable of the third research question was measured through four descriptors (See table 5). The content analysis of the variable reveals that surveillance conducted by CCTV cameras is most useful for investigating crimes (intensity=5). It is reasonable to assume that of the benefits of CCTV surveillance is detection of criminals, however in line with the literature review, detecting criminals through CCTV cameras is not as effective due to technical problems related to the cameras (intensity=3.5).

When asked if the treatment of CCTV based footages as evidences in the court can increase the credibility of court decisions, the majority of the interviews stressed

that court is an independent body that bases its convictions on laws and evidences. In other words, as long as the court bases its decisions on evidences, use of footages does not have any added value to the credibility of the court, unlike in other countries where it is used as supporting evidence or evidence (intensity=2). Finally, no crime is convicted in the court on the mere basis of CCTV footages. All the interviewees mentioned that footages are the starting point of any conviction, however they are insufficient for the court to make a proper decision. The conviction of the court is based on traditional means of identification which exclude CCTV footages.

Benefits of CCTV in the Court

| N | RQ 3 Descriptors | Frequency | Intensity |
|-----------|--------------------------|------------------|------------------|
| 1. | Detecting criminals | 7 | 3.5 |
| 2. | Investigation | 10 | 5 |
| 3. | Credibility of the Court | 4 | 2 |
| 4. | Convicting Crimes | 2 | 1 |

Table 5 The benefits of CCTV cameras in Armenia.

Findings

The survey analysis shows that people are concerned with their right to personal data protection by putting value in the consent prior to being captured by cameras, demanding for immediate compensation, and accepting to disclose personal data in some cases only. The content analysis of interviews discussed in the previous section reveals that although personal data protection concerns the people, the concern is not strong enough to take it to the court. This enables to reach to the conclusion that the willingness to protect personal data exists; however it is not practiced. Based on the findings from the survey and the content analyses, H1 that *the*

right to personal data protection vis-à-vis security cameras is not a concern for the citizens of Armenia is partially accepted.

The survey analysis also showed that generally people feel secure around security cameras. Moreover, people do not show any concern regarding the restriction freedoms imposed by surveillance especially in the case of children. The preference of shopping in stores or shopping malls that are under surveillance reflects a sense of security despite the risk of misuse of CCTV footages in these areas. Therefore, H2 that *the citizens of Armenia feel secure around CCTV cameras* is accepted.

The research also enabled us to answer the third research question, which aimed at exploring the risks and the benefits of CCTV camera surveillance in the Armenian cultural and legal context. Connecting the results to the existing literature on the risks and benefits of surveillance, the risks identified by the lawyers were along the lines of the risks discussed in the literature. A slight increase in intensity was noticeable in case of defamation compared to the literature that covers other countries in the west. The main risks mentioned were privacy violation, defamation, blackmailing, and misuse.

Regarding the benefits of the CCTV surveillance in Armenia, the results showed that it is least beneficial in convicting crimes since it is not accepted as evidence by the court. Based on the data collected, it is difficult to decide whether CCTV footages are considered supporting evidence. However, surveillance is an invaluable resource for criminal detection and crime investigation. The Armenian context differs from the discussed literature not in the refusal of the court to treat CCTV footages as evidence, but also in considering surveillance as a measure for increasing the credibility of the court.

Conclusion

The assumptions stated at the beginning of the research were transformed into research questions and hypothesis based on the literature review and personal observations. The previous research conducted on the topic of CCTV surveillance and human rights violations enabled the proper formulation of the hypotheses. However, the researcher assumed cultural differences in public attitude towards the two variables of the research. The results somehow validated this assumption, when people reflected an elevated sense of security around cameras and when they showed a general but limited concern over personal data. While the findings of the content analysis are fully in line with the literature, the cultural implication as well as the need for additional measure to increase the trust of the people towards the course was noticeable in the case of the quantitative data analysis of the public attitude.

In the data analysis it was mentioned that trust has been identified as an intervening variable between the willingness to disclose personal data and the type of the institution receiving the data. The results shed a light on the reluctance of the people to share their personal data with the police, even in cases of crime. Although the police is the legitimate institution for conducting investigations and detecting crimes, the people prefer disclosure of personal data to private corporations. This is an interesting discovery that deserves further research.

The data analysis also revealed that, although people were concerned with their own personal data, there was little concern over their children's personal data. This might be explained by the protective attitude of the adults towards children. However, the case is often different in other countries. In Armenia, children's safety, even at the cost of the risks imposed by CCTV surveillance, is prioritized over their right to personal data and freedoms. This too requires further research in the future.

References

- Ayub, Imran. 2015. "Poor Quality Footage Makes Security Cameras Ineffective - Newspaper - DAWN.COM." January 15.
<http://www.dawn.com/news/1157049>.
- Baker, Brian, and Whitney Gunter. 2008. "Surveillance: Concepts and Practices for Fraud, Security and Crime Investigation." International Foundation for Protection Officers.
- Bannister, Jon, and R. Nicholas Fyfe. 1996. "City Watching: Closed Circuit Television Surveillance in Public Spaces." *Royal Geographical Society* 28 (1): 37–46.
- Bergin, Anthony. 2013. "Boston Bombing Underlines Importance of CCTV Cameras." April 29. <http://www.smh.com.au/comment/boston-tells-us-not-to-be-blind-to-cctvs-uses-20130428-2imkl.html>.
- Carter, Adam. 2014. "Why Is Security Camera Video Still so Terrible? - Latest Hamilton News - CBC Hamilton." February 20.
<http://www.cbc.ca/news/canada/hamilton/news/why-is-security-camera-video-still-so-terrible-1.2542359>.
- Cohen, Julie. 2008. "Visibility, Transparency, and Exposure." *The University of Chicago Law Review* 75 (1): 181–201.
- "Conducting Privacy Impact Assessments Code of Practice." 2014. Information Commissioner's Office. <https://ico.org.uk/media/for-organisations/documents/1595/pia-code-of-practice.pdf>.
- "Data Protection Act 1998." 1998. The Stationary Office.
- Ditton, J., and E. Short. 1998. *Evaluating Scotland's First Town Centre CCTV Scheme*.
- Dobson, J.E., and P.F. Fisher. 2006. "Panopticon III: Framing the International Debate over Human Tracking." Paper presentation, February 16.
- "European Convention on Human Rights." 1950. European Court of Human Rights.
- Gras, Marianne L. 2004. "The Legal Regulation of CCTV in Europe." *Surveillance & Society* 2 (2/3): 216–29.
- Groombridge, Nic. 2002. "Crime Control or Crime Culture TV?" *Surveillance & Society* 1 (1): 30–46.
- "In the Picture: A Data Protection Code of Practice for Surveillance Cameras and Personal Information." 2015. Information Commissioner's Office.
- Keval, Hina. 2009. "Effective Design, Configuration, and Use of Digital CCTV." PhD Thesis, University College London.
- Kumar, Krishan, and Ekaterina Makarova. 2008. "The Portable Home: The Domestication of Public Spaces." *Sociological Theory* 26 (4): 324–43.
- Lyon, D. 1994. *The Electronic Eye: The Rise of Surveillance Society*. Cambridge: Polity Press.
- Newburn, T., and S. Heyman. 2001. *Policing, Surveillance and Social Control: CCTV and Police Monitoring of Suspects*. Collumpton: Willan.
- Nieto, M. 1997. "Public Video Surveillance: Is It an Effective Crime Prevention Tool?" Sacramento: California Research Bureau.
- Obermeyer, Nancy. 2007. "Moving Violations: Data Privacy in Public Transit." *Geographical Review* 97 (3): 351–64.
- Posner, Richard. 2008. "Privacy, Surveillance, and Law." *The University of Chicago Law Review* 75 (1): 245–60.

- Schwartz, Adam. 2013. "Chicago's Video Surveillance Cameras: A Pervasive and Poorly Regulated Threat to Our Privacy." *Northwestern Journal of Technology and Intellectual Property* 11 (2): 47–60.
- "Surveillance | Definition of Surveillance by Merriam-Webster." 2016. Accessed March 19. <http://www.merriam-webster.com/dictionary/surveillance>.
- "Surveillance Camera Code of Practice." 2013. London: The Stationary Office.
- "Surveillance - Definition of Surveillance in English from the Oxford Dictionary." 2016. Accessed March 19. <http://www.oxforddictionaries.com/definition/english/surveillance>.
- "Surveillance Meaning in the Cambridge English Dictionary." 2016. Accessed March 19. <http://dictionary.cambridge.org/dictionary/english/surveillance>.
- "Surveillance Policy and Procedures." 2015. Stafford Borough Council.
- Taylor, Nick. 2002. "State Surveillance and the Right to Privacy." *Surveillance & Society* 1 (1): 66–85.
- Taylor, Stacey James. 2005. "In Praise of Big Brother: Why We Should Learn to Stop Worrying and Love Government Surveillance." *Public Affairs Quarterly* 19 (3): 227–46.
- "The Universal Declaration of Human Rights United Nations." 1948. <http://www.un.org/en/universal-declaration-human-rights/>.
- "Zheptaceq, Dzez Nkarum en. Ov e Tesahskum Mez Erevanum - Mediamax.am." 2016. Accessed February 22. <http://www.mediamax.am/am/news/special-report/16983/>.
- "Norutyunner - Hayastani Hanrapetutyan Vostikanutyun." 2016. Accessed February 22. <http://www.police.am/news/view/%D5%A3%D5%A1%D6%8111125.html>.
- "Tesahskman Uxecuyc." 2016. Hayastani Hanrapetutyan Ardaradatutyan Naxararutyan Andznakan Tyvalneri Pashtpanutyan Gorcakanutyun.

Appendix

Survey Questionnaire

The survey is aimed at discovering public attitudes towards security cameras in Yerevan. On a scale from 1(strongly disagree) to 5(strongly agree), please, indicate your opinion.

I prefer shopping in stores that are under camera surveillance. 1 2 3 4 5

I prefer my children to hang out in places that are under camera surveillance. 1 2 3 4 5

The government should expand the budget allocated to security cameras. 1 2 3 4 5

Footages are more reliable evidences in the court than human witnesses. 1 2 3 4 5

Footages in which I have appeared should not be accessed by anyone, even in cases of crime. 1 2 3 4 5

I don't mind sharing my personal data with the police, if that helps in detecting crimes. 1 2 3 4 5

I don't mind sharing my personal data with private corporations if that contributes to their security. 1 2 3 4 5

Providing my consent for being captured by cameras is not essential for me. 1 2 3 4 5

If my personal data protection is violated, I will make sure it does not happen again. 1 2 3 4 5

If my personal data protection is violated, I will immediately demand compensation. 1 2 3 4 5

Semi Structured Interview Questionnaire

1. Does the personal data protection law cover CCTVs or is it relevant to CCTVs?
2. Do citizens appeal to the court for personal data protection?
3. To What extent are footages effective in the court?
4. Do CCTVs increase the credibility of the court?
5. Do CCTVs intrude privacy in Armenia?
6. What other human rights do CCTV cameras violate?
7. What are some benefits of CCTV camera surveillance?