“Why protest? I’ve got nothing to hide”

Collective Action against and Chilling Effects of Internet Mass Surveillance

A Master’s Dissertation

presented to the

Faculty of Politics and International Relations, University of Kent and the Faculty of Social Science and Philosophy, Philipps-Universität Marburg

in fulfilment of the requirements for the Degree Master of Arts in Peace and Conflict Studies (International Double Award)

by

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Marburg

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00 Abstract

With the recent revelations of Edward Snowden about Internet mass surveillance conducted by an intelligence complex of western states on citizens worldwide and protest forming in various countries to show disapproval, this master’s dissertation deals with the influence of outgroup definition, ingroup identification and the feeling of collective injustice on the willingness to protest against Internet surveillance. Furthermore, psychological factors of surveillance, namely chilling effects, are introduced and linked to the individual concern about surveillance and the identification as a victim of surveillance.

An online study with N=1137 participants was carried out in Germany to collect data about people’s attitudes towards Internet surveillance, their online and protest behaviour and their knowledge of the implementers of surveillance. To evaluate the collected data, multiple regression analyses were conducted.

Results show that outgroup definition itself has no significant influence on protest behaviour, but explains it via ingroup identification, which has a significant correlation with both the outgroup definition and protest behaviour. Additionally, collective injustice has a significant effect on protest and on ingroup identification. With regards to chilling effects, concern about surveillance and identification as being surveilled has significant effects on chilling behaviour.

**Keywords:** collective action, ingroup identification, outgroup definition, Internet surveillance, chilling effects, collective injustice, concern
01 Introduction

1.1. General

On June 5th 2013 former National Security Agency contractor Edward Snowden revealed secret documents about the surveillance complex of western intelligence agencies in one of the greatest leaks of internal, undisclosed information in history. Over many years, agencies such as the National Security Agency (NSA), one of several US-American intelligence agencies, and the British General Communications Headquarters (GCHQ) have developed techniques and systems to make ubiquitous surveillance of Internet users worldwide practically possible, thus allegedly breaching national and international laws of privacy, civil liberties and personal freedom. The intelligence agencies not only passively collect SMS and telephone data, intercept emails and record online behaviour to mass surveil millions of citizens, but are actively trying to use this information for their advantage by influencing the victim’s behaviour. For example, manipulation is carried out by setting up so-called honey traps to seduce male targets, spying on online porn habits of Muslims to discredit them (Greenwald & Gallagher 2013) and having task forces psychologically damage activist groups (Greenwald 2014a). Also, the communication of heads of state are being monitored (Gallagher 2014) just as the United Nations, the European Union (Poitras et al. 2013), the World Bank, the International Atomic Energy Agency (Nakashima & Gellman 2014) and foreign enterprises to conduct industrial espionage (Kirschbaum 2014). Entire countries are being wiretapped (Devereaux et al. 2014), telephone providers are being hacked (Der Spiegel 2013) and even within the Five-Eyes-Alliance1 there are no restrictions on spying on citizens of allied countries (Beuth 2013). The leaked documents show that 193 countries are of valid interest for US American intelligence on which they act upon constantly (Nakashima & Gellman 2014). With programs such as ‘Prism’, ‘Quantumtheory’, ‘Tempora’ or ‘XKeyscore’, the intelligence apparatus strives not only to acquire information about individual persons of interest, but also to tap every communication possible and evaluate it with big data analysis. This poses questions about the legality of the eavesdropping and the restriction of civil liberties of the population. Reports indicate that 9 out of 10 persons targeted are normal Internet users whose medical records, academic transcripts, résumés, private pictures and videos and messages of all forms are being monitored and recorded (Gellman et al. 2014). Surveillance techniques are deeply implemented into telecommunication systems worldwide and the intelligence’s hunger for data is so great that

1 Five Eyes describes a multilateral alliance between the Anglophonic countries Australia, Canada, New Zealand, the United Kingdom and the United States to exchange surveillance data (see e.g. Cox 2012).
ex-NSA staff William Binney calls it a totalitarian approach, which is only known from dictatorship. Methods of gathering intelligence have moved away from specifically targeting persons that are terror or criminal suspects “to the collection of data of the seven billion people on our planet” (Der Spiegel 2014).

For over a year now, the worldwide public has been discussing the topic in political debates, newspaper articles and books, in online forums and at offline conferences. Germany is one of the countries where Internet mass surveillance is debated widely by the public, in comparison to other countries, where surveillance also is common, such as France, Spain, Russia or China (Holland 2014a). Only after the revelations of Edward Snowden, public awareness for this topic has been increasing and a broad public debate has formed, which is necessary given that surveillance techniques and technology in general are being adopted and actively used faster than public debate can follow (Dinev et al. 2007). Rather than discussing the fact that the individual freedom and civil liberties of millions of people are being restricted, oftentimes the messengers, for instance Edward Snowden or the reporting newspapers and journalists, that publish the stories (especially British The Guardian, US-American Washington Post and Glenn Greenwald) become the focal point of interest, when being accused of threatening national security and aiding terrorists (Daily Mail Reporter 2014). The justification by governmental intelligence agencies for the indiscriminate eavesdropping on the general public is the prevention of terrorist attacks, based on the state’s duty to protect its citizens and guarantee an effective fight against crimes (Albrecht 2014). Especially after the attacks of September 11th 2001, the public has been willing to sacrifice their privacy in return for conjectural security (Gelbord & Roelofsen 2002). To ensure security, intelligence agencies need as much information as possible, therefore massively and unconditionally surveilling digital and analogue communication, making everybody a potential suspect. Thus, the presumption of innocence is annulled and the way is paved for the government to execute boundless power without much transparency or accountability of its actions. It is a debate about national security versus personal freedom and civil liberties. Since 9/11, people have been inclined to lean more towards security, placing it above freedom (Toner 2001), which only changed recently, when the scope of surveillance was revealed. The US-American Pew Research Center shows that civil liberties again become more important than protection from terrorism (Pew Research 2013), whose scope and danger is often exaggerated (Mueller 2005).
1.2. Past Protests and Reasons for Disinterest

During the last year, various social movements in different countries have arisen to protest against Internet mass surveillance, the practices of intelligence agencies and the restrictions to civil liberties. Nevertheless, the reaction by the general public has been rather small and – except for a few cases – protests were not well attended, compared to, for example, the massive protests against West German census promoting the expansion of state surveillance and restricting civil liberties in 1983/1987 (Frohman 2012). Although German citizens are thought to be particularly sensitive to state surveillance and the intrusion of privacy due to their past with Nazism and Communism (Toner 2001) and 87% of German citizens thinking that U.S. surveillance on the population is unacceptable (Pew Research 2014), large scale resistance has not emerged. The two biggest demonstration marches in Germany were held on July 11th 2013, where Germany-wide 10,000 people protested against mass surveillance by intelligence agencies (Breuer & Reißmann 2013) and on September 7th 2013 where over 15,000 people participated in the Freiheit statt Angst (engl. Freedom not fear) demonstration (Reißmann 2013). Other than these two examples, the general public has not shown any significant resistance against the practices of intelligence agencies and only smaller rallies and pickets (each with less than 250 participants) have been organised by various NGOs and individuals (e.g. Digitalcourage 2014; Horchert 2013).

The underlying reasons for the lack of interest in the topic of Internet mass surveillance or the lack of active protest against it, are multifaceted. On the one hand, studies show that many people in Germany are simply not interested in the topic or they have greater problems to worry about, such as inflation, immigration or unemployment, which are considered more important than privacy (Statista 2014; ZDF Politbarometer 2014). On the other hand, the problem of identifying an addressee of the protests arises. Until now, protests have been directed towards mass surveillance in general, towards foreign intelligence agencies (especially the NSA and the GCHQ), towards the German government and its handling of the spying affaire or against surveillance itself. A reason for this lack of clarity could be the abstract nature of the ‘enemy’. It is ineffective to protest against the concept or technique of surveillance rather than against governments or organisations as the implementer of this technique, who have the power to change or modify these practices. Protesting directly against spying agencies from another country has little chance of successfully changing the current techniques of mass surveillance, given the lack of influence German citizens have on these organisations. Directing protests against the German government and the parties that support surveillance and related techniques such as data preservation, has the greatest chance of success, yet until now, protests have mostly focused on surveillance itself (CCC 2013; Breuer & Reißmann 2013). Additionally, the feeling of powerlessness in the face of the degree of
surveillance and the influence previous protests have had on the political agenda have to be considered (Jobs 2014). Does it really make sense and is it worth opposing an apparatus of various governments and uncontrollable intelligence agencies?

Another major problem with the on-going digital surveillance, in comparison to analogue techniques of observation is that eavesdropping within the digital space is invisible. For example, in authoritarian regimes opened letters and suspicious neighbours are highly visible. Real-time interception of emails and chats on the other hand cannot be traced easily. Because it is unobtrusive, technically complex and hard to grasp the extent of the collection of Internet data, it is very difficult to detect Internet surveillance. Digital spying is often compared to radioactivity, because of its invisibility, the fact that it cannot be felt and that the impact does not show immediately (see e.g. Diehl 2013). Even though surveillance methods have been implemented for years, they did not become visible and did not have any effect on the normal Internet user, which makes the threat of intrusion of privacy intangible and might have a negative effect on active protests. For example, massive protests emerged in Europe 2010 through to 2012, when the Anti-Counterfeiting Trade Agreement (ACTA) was about to be ratified. A reason for the active participation was the breakdown of the complex and abstract agreement to the simple message that the Internet would be widely censored by this trade agreement, which then mobilized thousands across Europe (Vetter 2012; Arthur 2012). With this thesis, I try to make a contribution to applying this breakdown to the protest against Internet surveillance in order to identify a clear outgroup and illustrate the degree of which online surveillance concerns everybody.

1.3. Structure and Relevance of this Thesis

The first part of this master’s dissertation will explore why so few people in Germany actively protest against Internet mass surveillance and what variables influence them in their decision to protest. It will consist of psychological approaches to identity theory, collective identity, group behaviour, the importance of differentiation of ingroup and outgroup and the definition of an outgroup when trying to predict protest behaviour. On the basis of these theories a first hypothesis will be derived. For a second hypothesis, the theory of relative deprivation is used to introduce the variables of injustice and illegitimacy as predictors of protest behaviour.

In a second theoretical part, this master thesis deals with the psychological aspects of surveillance, namely the so-called chilling effects, which are responsible for individual behavioural changes due to surveillance. Many studies prior to the revelations of Edward Snowden have shown that people change their behaviour when they perceive, either correctly
or incorrectly, that they are being surveilled. These studies mostly concentrate on offline surveillance (see e.g. White & Zimbardo 1975), but with the rise of the Internet, online surveillance was put more and more into focus. Recent research explores chilling effects in relation to online observation and confirms the effects found on offline wiretapping for Internet surveillance (e.g. PEN American Center 2013; DIVSI 2014). Psychologically, these effects are rooted in group identity theories (Tajfel et al. 1971; Turner et al. 1987), which describe when and why individuals identify with a certain group rather than individually and accept and conform to group norms. The change in individual behaviour to act upon group norms grows out of fear of reprisal by the authorities that implement surveillance. This self-censorship not only has psychological implications, but also consequences on political engagement, because fear pre-emptively hinders individuals in expressing their needs and acting upon them. When people do not talk freely and engage in political activities, a societal inequality appears and only government conforming behaviour is expressed. This is a deep intrusion of civil liberties and personal and political freedom. Furthermore, the power balance between a government and its citizens becomes even more unequal, which is detrimental to democratic values and the notion of a free society. In the second part of this master’s dissertation, the research of chilling effects pre and post Snowden will be presented and an overview of the political power of surveillance is given. With a social psychological approach a third hypothesis will be derived.

To test the hypotheses being deduced in the Theory part, an online survey was conducted, which will be described in detail in the Methods section of this dissertation, before the Results are presented and incorporated into the theory in the Discussion. After Strengths and Limitations, and Practical Implications and Future Directions are discussed, a Conclusion will be drawn.

This study is of relevance because until the date of the publication of this dissertation, there has been no other study, exploring the protest behaviour in Germany against the Internet mass surveillance revealed since mid-2013 and its psychological effects on the population. The field of surveillance research in general and online surveillance in particular is important because with the enormous extent of surveillance on citizens, the psychological factors and effects have to be examined further. There is no doubt that analogue surveillance (i.e. all non-digital monitoring) has chilling effects on the population, which is a restriction to their civil liberties (see e.g. White & Zimbardo 1975), but these findings have to be transferred into the digital space as few studies have already been doing (e.g. Sidhu 2007) because of its on-going relevance for subjects of Internet mass surveillance worldwide.
02 Theoretical approach to Protest Behaviour against surveillance

Though the topic of mass surveillance has been predominant in the media over the past 14 months, few people appear to be interested and even fewer are willing to participate in protests against it. The reason for this could be a general disinterest in the topic, its relevance (problems like immigration or unemployment are regarded more important than privacy; ZDF Politbarometer 2014), the lack of a clearly defined outgroup to protest against, the perceived legitimacy of governmental eavesdropping or the general handling of data in times of Google and Facebook. So far protests against surveillance in Germany have focussed on foreign intelligence agencies (especially the NSA and the GCHQ) and state surveillance in general (e.g. CCC 2013; Breuer & Reißmann 2013). These protests are directed towards authorities on which German citizens do not have any influence whatsoever or against state surveillance, which is a concept rather than an institution or government that could change their regulations or laws concerning surveillance. To understand when and why people engage in collective action against Internet mass surveillance, identity processes, social behaviour and group context, which play an important role in predicting protest behaviour have to be examined (van Stekelenburg 2013). The first two hypotheses derived in this chapter are based on social identity theory, collective identity, the differentiation of in- and outgroup and relative deprivation theory.

2.1. Social Identity Theory

Individuals categorise themselves into different social groups to gain a positive social identity, which is composed of their membership and their appraisal of these groups (Turner et al. 1987). An individual sees herself as similar to a particular group while at the same time different from others. Group membership has to be internalised and not given by others, in order to acquire a positive social identity (Social Identity Theory; Tajfel & Turner 1979), which is strengthened by this social categorization that enhances the awareness for a group. Tajfel and Turner (1979) emphasize the individual’s determination of its own position within a social environment, which is based on the perceived, (positively) appraised and emotionally connected group membership. This self-enhancement, where the ingroup is positively distinguished against a relevant outgroup, strengthens social identification, which differs in

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2 Collective action is defined as the “response to an objective state of disadvantage” (van Zomeren et al. 2008: 505) with the goal of enhancing the overall status of a group (Wright et al. 1990). It normally takes place within a group, but can be performed individually in so far as this action is exercised in the interest of the group (e.g. signing petitions).
degree between individuals (Turner et al. 1987). When social identities are threatened, group members enhance their social self-esteem by seeking positive group distinctiveness from other groups in order to avoid a threat to the ingroup’s position and a loss of positive comparisons (Haslam et al. 1996; Tajfel & Turner 1979). During the process of self-enhancement of the ingroup, stereotypical attributes are assigned and evaluated. The ingroup is associated with positive attributes, whereas “they” (i.e. the outgroup) are negatively appraised, a process which elevates the difference between in- and outgroup and augments people’s social self-esteem (Haslam & Turner 1995; Turner et al. 1987). This effect of group polarization is increased because the group member’s converge to more extreme positions to differentiate their ingroup from the relevant outgroup (McGarty et al. 1992). This structures groups within a political field into ‘pro’ or ‘con’, allies or enemies (van Stekelenburg et al. 2010).

With regards to surveillance, studies show that group membership has an impact on how surveillance is perceived and reacted to (e.g. Alder 2001). For instance, surveillance could cause undesirable tension between the surveillant and surveilled (Oz et al. 1999). The role of surveillants is usually expected from outgroup members, not from within the ingroup with which identity is shared (Simon & Oakes 2006). For example, Levine (2000) underlines the importance of knowing people’s group membership and their level of identification with the implementer of surveillance to determine their reaction to surveillance. When identification with the surveillant is increased, surveillance is perceived as a safety measure rather than an intrusion of privacy (O’Donnell 2010).

2.2. Collective Identity

When group members categorize themselves, a special form of identity called collective identity is constructed. The change from individual identity (‘I’ or ‘me’) to collective identity (‘we’ or ‘us’) is based on the salience of group membership of the individual, which regulates their social behaviour (Simon & Klandermans 2001) and influences justice concerns (Tyler & Smith 1995) and the willingness to engage in social protest (De Weerd & Klandermans 1999; Simon et al. 1998). The salience of this shared collective identity is dependent on the immediate social context and the categorization of an ingroup and an outgroup within different contexts. Simon et al. (1998) measure collective identity by evaluating the identification with a disadvantaged group and by examining the identification with a social movement organisation or a movement in general. Higher identification with a group leads to a higher perception of collective disadvantages (Mummendey et al. 1999), which, combined with the perception that the disadvantage is unfair and the awareness that the public has to be involved, forms a special type of collective identity: politicized collective identity (PCI)
PCI acts as a dual identity (Klandermans 2014) because identification with both an ingroup and a superordinate entity becomes salient simultaneously. Additionally, dual identity is directly positively related to politicization (Simon & Ruhs 2008). Through PCI, context is provided on a group level (e.g. shared grievances, adversarial attributions) to foster political involvement on behalf of the ingroup (Simon & Grabow 2010). The higher politicized collective identification with a movement is, the more individuals are willing to participate in collective action (Simon et al. 1998). PCI is subject to the explicit motivation of group members to engage in a fight for resources. Members of an inferior group need to be aware of their group membership, their common enemy, and especially the broader social context of the power struggle to gain the attention of a third party (e.g. the public) and win them for their interests. Through this underlying power struggle and the politicization of collective identity, a transformational process in the relationship of the group to its social environment is undergone (Klandermans 2014). Because of the awareness of common shared grievances, the identification of an external enemy, who is responsible for these factors, and the demand for change, PCI is a continuous process. As long as change does not occur, the power struggle continues and expands through support of more powerful authorities, which helps collective identity to fully develop (ibid.). Here, it is necessary for the disturbing factors to be experienced as a group problem, whereupon collective identity acts as support for the perception of a common problem and stereotyping and homogenizing help to cognitively restructure the social environment. Identity shifts from individual to collective (from ‘yours’ and ‘mine’ to ‘ours’) (Simon & Hamilton 1994; Turner et al. 1987; Simon & Klandermans 2001).

The Social Identity Theory predicts a reciprocal relationship between collective identity and the participation in social movements. On the one hand, collective identification with a social movement increases participation in collective action, on the other hand, intergroup conflict and the confrontation between in- and outgroup strengthens collective identity (Turner et al. 1994). Results of Stürmer & Simon (2004) show that collective identity can be politicized to such an extent that it is a good predictor of collective action. Identification with a social movement predicts the willingness to act collectively better than the identification with the broader social category. Additionally, identification with a particular organisation increases the participation in collective protests, whereas the participation in protests augments identification itself. Furthermore, the participation in collective protests not only increases the identification with a movement, but with the group in general, which is an indication of the dynamic relationship between identification and participation (Stürmer & Simon 2004). The willingness to protect the group’s identity against an outgroup by taking action can be predicted by the appraisal of the position of the ingroup in relation to the outgroup. When the ingroup is perceived as being in a strong position, offensive emotional reactions (anger) and
behavioural tendencies (collective action) are expressed towards an outgroup. Thus, group identification mediates the appraisal on action tendencies, “indicating the importance of the psychological conditions for experiencing emotions on behalf of one's group” (Mackie et al. 2000: 613). In addition to the level of politicized collective identification as a predictor of protests, group-based anger is connected to a stronger willingness to engage in collective action against any disadvantages to the ingroup via a higher relevance of the ingroup (van Zomeren et al. 2004).

2.3. Inggroup-Outgroup-Differentiation

A high degree of collective identity, induced by similar attitudes, preferences and attributes, leads to stereotyping and favouring the ingroup and collectively differentiating from and discriminating against an outgroup. The identification of an ingroup depends on the differentiation between this ingroup and an outgroup (e.g. Haslam & Turner 1995). It is not only positively associated with the perceived discrepancy between the actual and the ideal degree of differentiation from an outgroup (Turner & Crisp 2010), but also with the differentiation of ingroup and outgroup itself (e.g. Schmitt & Branscombe 2001). As the degree of identification with a group plays an important role in the process of differentiating from an outgroup, members who highly identify with a group try to protect the group’s identity, whereas members with a low identification with the group rather seek to protect their individual identities (Ellemers et al. 1997). High identifiers, who perceive a high level of intergroup conflict, show more outgroup contrast, which is described as the tendency to attribute opposed characteristics to the individual or the ingroup and the outgroup (Riketta 2005). This differentiation is particularly high if the relationship between in- and outgroup is seen as conflicted.

Social Identity Theory predicts that members of a group will show signs of intergroup bias to positively differentiate their ingroup from an outgroup. This behaviour often develops into ingroup favouritism and outgroup derogation (Brown 2000; Lindeman 1997). People’s psychological needs for similarity can be satisfied by positively appraising the ingroup, whereas the need for uniqueness can only be assuaged by derogating an outgroup (Brewer & Roccas 2001; Markus & Kunda 1986). Hence, without an outgroup, ingroup identification cannot take place, because a group can only be positively appraised vis-à-vis another group and the degree of identification with a group is a moderator for positive group distinctiveness (Tajfel & Turner 1979). When ingroup identification is not possible, collective identity does not form, having a direct negative influence on the willingness to protest (Stürmer & Simon 2004).
To my knowledge, all social psychological literature on protest behaviour so far has a clear ingroup versus outgroup constellation, where one group protests against another party or against their political actions (see e.g. Klandermans 1997; Snow et al. 2007). Research on protest without a distinctly defined outgroup does not exist. I argue that the protests against Internet mass surveillance are still relatively small and have not had any impact yet because in this scenario individuals do not perceive a clear outgroup to protest against. There are only few candidates for the addressee of protests against Internet mass surveillance in Germany: on the one hand, the protests can be directed against the US and the British government and their intelligence agencies (i.e. the NSA and the GCHQ) and on the other the German government (including pro-surveillance parties and the German intelligence agency, Bundesnachrichtendienst, BND) can be the target of protests. A third possibility is to direct protest against surveillance itself (see e.g. CCC 2013; Breuer & Reißmann 2013; Reißmann 2013), though this faces particular problems since surveillance as a concept is too abstract to form an outgroup to oppose. Almost none of the past protests in Germany were directed towards a specific outgroup on which protests could exert any effect, but rather focused on state surveillance.

These considerations lead to the assumption that the lack of a clearly defined outgroup inhibits ingroup identification and development as victims of surveillance thereby constraining the willingness to protest against Internet surveillance.

2.4. **Hypothesis 1**

On the basis of these considerations and this assumption, I propose a first hypothesis:

*Hypothesis 1: The less an individual perceives a clear outgroup, which can be held responsible for surveillance, the less he or she will identify with an ingroup of surveilled people and be willing to protest against Internet surveillance.*
2.5. **Perceived Fairness, Relative Deprivation Theory**

In addition to the identification of an ingroup and an outgroup, other psychological predictors for collective action are the perceived unfairness and maltreatment of the ingroup and the group efficacy regarding the output of the protests (Klandermans 1997). In his relative deprivation theory Runciman (1966) states that a judgement about fairness is essential when examining whether and how people react to collective disadvantages. According to Gurr (1970) relative deprivation is the perceived discrepancy between what a group believe they are entitled to and what they actually have. If the group recognizes that they do not have what they claim, relative deprivation occurs. This can lead to protest behaviour when a salient social identity forms, the deprivation is experienced collectively and solutions or alternatives to the current intergroup structure are available (Wright et al. 1990). Runciman (1966) distinguishes between personal or egoistical deprivation, where a person feels individually disadvantaged, and fraternalistic or group deprivation where a person sees her ingroup in an underprivileged position. Studies show that feelings of fraternalistic deprivation lead to collective action, whereas the perception of egoistic deprivation drives individual action (e.g. Dubé & Guimond 1986). If a disadvantage is perceived collectively and appraised as illegitimate the probability of engagement in collective action increases (Mummendey et al. 1999; Wright et al. 1990). People react to collective disadvantage, unjust treatment or threat on the basis of moral principles, which influence how people perceive social or political situations and are seen as reference points to disclose discrepancies between the actual and ideal situations. People are more willing to engage in collective action in order to restore their moral principles and defend them if they perceive that they are threatened illegitimately or unfairly (Kelly & Breinlinger 1996; van Zomeren et al. 2011). To perceive a situation as illegitimate or unfair collectively, people need to know whether other ingroup members experience and feel the same way regarding collective disadvantage in order to help define the situation as collective and group based (Klandermans 1997). Therefore, social support by fellow group members is another group-based appraisal necessary to perceive, react and act upon collective disadvantage (Mackie et al. 2000).

Studies show that the purpose of surveillance is important when perceiving surveillance as illegitimate and as an invasion to privacy (e.g. Alge 2001; Dinev et al. 2007; Friedman et al. 2006; Stanton & Weiss 2000). If Internet surveillance is perceived as a needed practice to benefit security (e.g. to support the fight against terrorism), social order and convenience, Internet users not only participate voluntarily (Lyon 2001), but also tend to support surveillance practices (Dinev et al. 2007). However, surveillance is perceived as unjust and illegitimate if it is aimed at ordinary citizens and does not serve the purpose of protecting citizens from (terrorism) threats (ibid.). The current revelations of Edward Snowden show the
indiscriminate online observation of ordinary citizens without initial suspicion, which is contrary to law and opposed to civil liberties in the United States and Germany amongst other countries (Holland 2014b). This should induce relative deprivation and group-based anger, which leads to collective action (van Zomeren et al. 2004).

2.6. **Hypothesis 2**

Taking these thoughts and the results of previous studies into account, a second hypothesis is formulated:

*Hypothesis 2: The more individuals collectively feel that they are being unjustly and illegitimately surveilled, the more they engage in protest.*
Moving from the primary focus of this Master’s dissertation exploring why people in Germany do not protest against Internet mass surveillance, this chapter focuses on the psychological aspects and impacts of surveillance from where a third hypothesis will be derived. Starting with the definition of chilling effects and a section about the balance of power of surveillance, various studies of the pre-Snowden (i.e. before June 2013) and post-Snowden era will be presented, before a social psychological approach and the third hypothesis is introduced. Due to the scope of this dissertation, I will concentrate on chilling effects and leave out other psychological factors of surveillance such as stress (e.g. Smith et al. 1992) or the influence of surveillance on identity (e.g. Brown 2013) and authority (Subašić et al. 2011).

With the rise of digital technologies over the past decades, the possibilities of surveillance methods increased dramatically. Closed Circuit Television (CCTV) cameras, smartphones and the elevated importance of the Internet in everyday life made it not only possible, but very easy for governments and private companies to track people’s every move and do complex analyses of their behaviour in real time, thus making it possible to predict future behaviour. In the times of the Cold War surveillance of other states was seen as politically inevitable, but this legitimation for spying disappeared after the fall of the Berlin Wall (Stadler 2014). Nowadays, the list of justifications for governmental surveillance of foreign and domestic citizens is long and ranges from assuring intellectual property and protecting cyber and national security to child protection and above all – since the terrorist attacks of September 11th 2001 – counter-terrorism measures (Richards 2013). Regardless of any justification and the possible illegitimacy of surveillance, there are various psychological effects on surveilled individuals and groups, which have been studied not only since the revelations of the practices of intelligence agencies by Edward Snowden, but long before the emergence of the Internet. In particular, so-called chilling effects of off- and later online surveillance have been the focus of studies within the field of psychology for more than 40 years.

3.1. Definition of Chilling Effects and the Power of Surveillance

Chilling effects are defined as the effects that deter individuals from engaging in lawful activities because of perceived or actual surveillance or regulation by superordinate authorities such as the government (Horn 2005). Because individuals who perceive governmental monitoring of their behaviour, fear sanctions (e.g. when engaging in political actions), they purposely alter their behaviour in advance to conform to the law and extra-legal norms of the
observer. Regarding the German census in 1983, the German Federal Constitutional Court (Bundesverfassungsgericht) states that individual chances for development and common welfare are derogated by surveillance because self-determination is a fundamental condition of functional and participating citizens. If citizens are unsure whether deviant behaviour is being monitored and recorded such behaviour is purposely suppressed (BVerfG 1983). Also, the United Nations Rapporteur on the Protection of Human Rights reports on “chilling effects on users who are afraid to visit websites or to communicate with other persons for fear they will face sanctions” (Scheinin 2009: 13). Many individual-level studies show this negative influence of government surveillance on political activity in the former USSR (Bahry & Silver 1987; DiFranceisco & Gitelman 1984; Gibson 1993), Central America (Booth & Richard 1996) and – more recently, focused on online surveillance – on US-American citizens (Marthews & Tucker 2014; PEN American Center 2013), journalists and lawyers (Human Rights Watch 2014) and NGOs (Electronic Frontier Foundation 2013) as well as Norwegian (NDPA 2014) and German citizens (DIVSI 2014). The avoidance behaviour of chilling effects is problematic, because people self-censor themselves out of the fear of reprisal, thereby limiting their civil liberties, individual autonomy and intellectual freedom. This is damaging to political activities, which are essential for a democracy to be effective (Guelke & Sorell 2010; Richards 2013) and detrimental to a free and open society. It hinders free expression of ideas and opinions (Hollander 1975) and discriminates against certain social groups and parties, not least because the distribution of chilling effects is not random across the political spectrum (Best & Krueger 2008). This is because of the difference in power dynamics between the ruling government as implementer of surveillance and the oppositional parties, groups or individuals as victims.

Beyond its political extent, Internet surveillance is psychologically very interesting and important, as a result of the doubt individuals feel over whether they are actually being monitored. Compared to offline surveillance (e.g. executed by existing authoritarian states or the former GDR), online surveillance is abstract and not tangible. Offline surveillance in the former GDR conducted by the Ministry for State Security (Ministerium für Staatssicherheit, Stasi) or the current degree of installed CCTV cameras in public space were and are more visible because surveillance by the Stasi was in some cases evident (chases, open letters, intercepted telephone calls, etc.) (e.g. Biermann 2013; Beckedahl 2014; Trojanow 2014) and observation cameras nowadays dominate the cityscape especially in the United Kingdom (Levine 2000). According to conservative estimates, there is one CCTV camera per fourteen people and, on average, one per every five students in secondary schools in the UK (Basil 2014). In contrast, it is technically very difficult to be certain about whether emails, phone calls, SMS or chat protocols are being intercepted and their metadata and/or content being stored.
Victims of online surveillance can never be entirely sure if they are being under surveillance at any given moment while being online. Consequently, they then restrict their behaviour continuously as if they constantly were the objects of surveillance. This is the key element of Foucault’s Panopticon, which derived from Jeremy Bentham’s idea of an efficient prison where it is essential “that the person to be inspected should always feel themselves as if under inspection, at least as standing a great chance of being so” (Bentham 1791: 24). The structure of the Internet is inherently akin to the Panopticon, because intelligence agencies and Internet service providers can monitor the Internet user’s online behaviour at any given time without their knowledge (Brignall 2002). Therefore the Internet becomes a Post-Panopticon where the assumed omnipresence of surveillance leads to privacy, social contacts and thinking being monitored and self-control being executed (Kahmann 2013; Bauman 2000). A mental state of internalisation of norms is induced by monitoring individuals without them having the ability to see the watcher, which results in a behavioural modification of the watched. The Panopticon’s major disciplinary effect is “to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power” (Foucault 1995: 201). Whether they are actually being watched is irrelevant. They simply need to perceive that they are being watched so that they begin to watch themselves.

For the observer it is possible to influence the behaviour of a majority by hiding from the monitored and using and exploiting structural characteristics and contexts of surveilled space. Marx (1988) describes this as the ‘maximum security society’ where daily lives are influenced by the means of technology and there is no distinction between public and private. Information is used wittingly not only to expose past unlawful behaviour but also to prevent and deter future behaviour. Through these practices, collective identity is overthrown and a collection of separated individuals results (Foucault 1995). This leads to the debilitation of the individual’s power and to a dissociation of the dyad between the seeing and the being seen. Thereby the power differences between the state as the implementer of surveillance and the citizen as the victim is increased. Citizen’s knowledge of the actions of the government decreases constantly, while the government’s knowledge of its citizens increases. This is damaging to democratic values, personal privacy and freedom because of social conformity of individuals and mass homogenization of opinions. Only a heterogenic community, including both, a control system and a certain level of disorder at the same time, can be a healthy society (Sennett 1992). The power imbalance between surveillor and surveilled opens the possibilities

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3 Bentham’s architectural principle of a perfect prison contains a watchtower in the middle of circularly installed prison cells. The guards in the middle can observe every cell, whereas the inmates cannot see the guards, hence do not know whether they are actually being observed (Betham 1791).
of exercising boundless power without transparency or accountability at the expense of civil and human rights (Greenwald 2014b). The intentions of the surveillor are never exposed and there is no reciprocal exchange of visual data between the watcher and the watched (Levine 2000). Chilling effects restrict the individual in his freedom of speech out of fear from the powerful, omniscient state.

The safest way to avoid attention from governmental agencies is for individuals to show obedience and conformity, where individuals adopt opinions and appraisals of a majority even though they individually have a different belief (Asch 1951). Many people accept the notion that if they are not seen as a threat by the government, they do not have to fear reprisal. “I have got nothing to hide” becomes an often-repeated statement by people loyal to the government. However, this implies a restriction to an open and free democratic state, because deviancy needs privacy and for a democracy it is essential for citizens, including minorities and marginal groups, to feel free from government surveillance (Greenwald 2014b). Abandoning and oppressing critical and deviant statements is therefore borne out of the fear of state surveillance.

3.2. Chilling Effects and Aspects of Surveillance pre-Snowden

Prior to the revelations of Snowden on the indiscriminate surveillance on citizens worldwide, much research has already explored the general effects of surveillance on workers (e.g. within an industrial environment; Landsberger 1958), electronic performance monitoring on individuals working on computers (e.g. Pierce et al. 2013) and chilling effects on everyday behaviour (Oulasvirta et al. 2012), opinions (White & Zimbardo 1975) and Internet surveillance (e.g. Sidhu 2007).

The often-cited Hawthorne effect showed as early as the 1920’s that people change their natural behaviour in an industrial context just because they know that they are being part of a study and are being surveilled. The modification of behaviour was positive (an increase in work productivity) and motivated by the presence of investigators and their interest in the participant’s work (Landsberger 1958). Other studies within the field of industrial and organizational psychology on the modification of behaviour deal with monitoring workers at their computerised workspace and monitoring their flow of work on the computer, where participants changed their behaviour in a positive way and improved productivity (Pierce et al. 2013). Furthermore, studies show that rowdiness in Swedish soccer stadiums declines dramatically after introducing security cameras (Priks 2008) and the presence of observers in public restrooms has a positive effect on the frequency of hand washing (Munger & Harris
Despite these examples of positive effects, the majority of studies show negative effects of off- and online surveillance, including the chilling effects discussed in this dissertation.

An early study on chilling effects was conducted by White & Zimbardo (1975), who examined whether surveillance has an effect on the expression of controversial political opinions. Participants who ostensibly were exposed to surveillance changed their statements to a socially more accepted opinion and tended to use second or third person pronouns ('you', 'they', 'people'). Only 44% took a controversial view on the topic of the legalization of marijuana compared to 77% in the ostensibly not monitored control group. Additionally, the 'threatened' participants showed more emotions of fear and inhibition (White & Zimbardo 1975). Hence, surveillance not only promotes conformity, but also distrust and fear (Greenwald 2014b). This goes as far as governmental agencies actively (and successfully) trying to induce these emotions to chill political activities by “enhancing the paranoia in […] circles” of anti-war activists (Mazzetti 2014), surveilling entire Muslim communities (Powell 2012) and equating journalistic work about state surveillance with terrorism (Greenwald 2014b). After 9/11, particularly Muslim people became an open target of off- and online government surveillance and showed such amounts of chilling effects and fear that to some extent they stopped using everyday forms of technology like mobile phones (Sidhu 2007; Powell 2012).

Other studies show how the invasion of privacy by surveillance methods is perceived, how this perception changes over time and what effects these methods have on individuals. The Helsinki Privacy Experiment, where cameras were placed in participants’ homes over a period of six months, shows that subjects of ubiquitous surveillance first complain about the monitoring and the invasion of their privacy in their daily lives, but soon report that they got used to it and surveillance methods began to go unnoticed (Oulasvirta et al. 2012). Even though their actions were not unlawful, there were various things that participants would rather have kept private and – under surveillance – did not execute. People become accustomed to surveillance when it is executed over a longer period of time and change their behaviour permanently or refrain from becoming politically active (Zurawski 2014), even if surveillance is omnipresent and the participants, at the beginning, are opposed to it.
3.3. Chilling Effects and the Aspects of Surveillance post-Snowden

In the last year, since the revelations of Edward Snowden, several, mostly descriptive, studies have been released that deal with the changing behaviour effects and general impact of Internet mass surveillance on individuals. For example, Marthews & Tucker show substantial chilling effects of government online surveillance “both domestically in the shorter term and internationally in the longer term” (2014: 27). Internet search terms from different sources, amongst others from the US-Department of Homeland Security, were examined and contained next to terror-related words such as dirty bomb, assassination and contamination, also rather unsuspicious words like emergency, authorities and security (DHS 2011: 20-23). A drop in Internet traffic was found not only for these keywords, but also personally sensitive terms (e.g. abortion, coming out or gender reassignment). Additionally, other studies show further chilling effects on citizens of the current Internet surveillance methods of intelligence agencies. American writers association PEN conducted a study among its members demonstrating that 16% avoided writing or speaking about a particular topic and 24% deliberately avoided certain topics in email or phone conversations. 28% curtailed social media activities (PEN American Center 2013). The outcome of a study by the Norwegian Data Protection Authority with Norwegian citizens confirmed these results (16% avoided searching for specific terms online) (NDPA 2013). The Electronic Frontier Foundation registered an impediment to the work of 22 American advocacy organisations because of the recent revelations and a decline in the willingness of citizens to seek help from these NGO via phone hotlines (Electronic Frontier Foundation 2013). In a recent study by Harris Poll, almost half of the participants (47%) reported that they have been changing their online behaviour since the Snowden revelations (Cobb 2014). They are being more cautious when browsing the web or communicating online. Almost a fourth distrust email services and use them less frequently. The German NGO DIVSI conducted a representative survey in April/May 2014 with 1007 participants, where 9% became “much more cautious” and 14% “a bit more cautious” when browsing the Internet, writing emails or making phone calls (DIVSI 2014). These numbers demonstrate that people have become more aware of Internet surveillance since the beginning of the reports on the Snowden documents and many are consciously changing their behaviour. The number of people unconsciously behaving normatively and refraining from showing deviant behaviour is open to speculation.
3.4. **Social Psychological Approach to Chilling Effects**

To understand the psychology of chilling effects, conformity and normative behaviour, the social identity model of deindividuation effects (SIDE) introduced by Reicher, Spears & Postmes (1995) will be applied. It assumes that deindividuation is a form of depersonalisation as defined by the self-categorization processes (Turner et al. 1987). Because individuals categorise themselves hierarchically and dependent on the situational and social salience of their social identity, they act according to group rules rather than their individual norms. Within a group, identification takes place on a group and intergroup level, where comparisons are made on the basis of social (i.e. group) identity rather than personal identity. Self-identification occurs through ingroup membership and comparison with outgroups, at which point behaviour is defined by group norms and conformity within the group arises (Turner et al. 1987; Tajfel et al. 1971). Behaviour against group norms does not occur because group norms rather than individual ones are being introduced which – from an individual perspective – often implies a change in behaviour. Thus, socially regulated behaviour through deindividuation is shown, which increases normative behaviour and constrains individual deviant behavioural patterns. Furthermore, the feeling of anonymity of individuals in a group plays an important role when examining the chilling of deviant behaviour. Levine (2000) extensively studied its effect in conjunction with surveillance of public spaces with the help of CCTV cameras. On the one hand, people who are being surveilled and are visible to authorities can be made accountable for their actions, therefore acting normatively within their group’s rules. On the other hand, individuals are expected to engage in anti-social behaviour when they are not being watched. Awareness of and concern over surveillance become requirements for predicting people’s behaviour under surveillance (Levine 2000). For example students that are knowingly identifiable to staff members and visible to each other, are more likely to minimise the degree of directly punishable behaviours (Reicher et al. 1998). Direct confrontation through non-normative behaviour is avoided in order to circumvent drawing the attention of authorities to oneself.

The assumptions of offline surveillance can be transferred directly onto online surveillance, where studies previously presented in this dissertation, show chilling effects of online observation in the pre- and post-Snowden era. In particular after Snowden’s revelations, a change in online behaviour, as people curtail their statements and show differences in general online behaviour – e.g. within social networks or when searching for specific terms online – has been observed (PEN American Center 2013; NDPA 2014; DIVSI 2014).
3.5. Hypothesis 3

Based on these theoretical assumptions, I hypothesise the following.

*Hypothesis 3:* The more individuals are aware of and concerned about surveillance, the more they refrain from talking/writing about controversial topics online (i.e. show chilling effects).
04 Methods

In this part of the present study, the methodological approach is presented. The sample and the study design are described, before the applied statistical methods are explained briefly.

4.1. Sample

N=1137 subjects participated in the online study whereof 50.4% were male and 49.1% female (six people not answering this question). The mean age was 28.5 years (SD=8.66) with a range from 14 to 65 years (14 people not answering this question). 95.7% of participants were Germans (of which 7.7% were born in East-Germany); Austrian (total of 9), Russian (4) and Swiss (3) were the most common Non-German nationalities represented. On the 10-point Likert item of political attitude, 15.8% (180) classified themselves as very left (1 and 2 of 10), 26.9% (306) as rather left (3), 25.7% (292), 15.4% (175) as centred (4, 5) and 2% (22) as rather right (8 and above). A vast majority of participants has either a German Abitur (A-Level; 48.4%) or graduated university (45.5%). The number of people that graduated Realschule (secondary modern school; 4.7%) or lower (0.9%), or had no education at all (0.2%) was very low. The mean Internet consumption in hours per day was 5.07 (SD=3.81).

People participated voluntarily in the survey and had the chance of winning one of three Amazon.de vouchers (1x 50€, 2x25€).

4.2. Study Design

To test the hypotheses presented in 2.4, 2.6 and 3.5 an online questionnaire was designed, which is presented fully in Annex A1 (in English) and A2 (in German as presented to the test subjects). Because the study focused on protest behaviour and chilling effects in Germany, the online survey was conducted in German to reach a wider audience. The questionnaire was split into seven sections:

- Demographics
- General and control questions
- Identification
- Chilling Effects
- Surveillance Concern
- Past collective action, future tendencies and political orientation
- Outgroup definition
Generally, most items were processed using either 4-stage Likert items or an open-ended response format. Only the political orientation was assessed using a 10-point item from ‘left’ to ‘right’.

After collecting demographics (age, gender, education, nationality and Internet consumption), two general questions were asked to gather information on how much people are informed (intensity: How closely are you following news stories about Internet surveillance in Germany) and worried about online surveillance (concern: In general, how worried are you about current levels of government surveillance of Germans). To find out if participants identify themselves as being surveilled they had to answer two questions on the likelihood of being surveilled (LHsur: How likely do you think it is that you are being surveilled when using the Internet) and the identification with group of surveilled persons (IDsur: How much do you identify with the group of people being surveilled), which were modified from identification questions by Stürmer & Simon (2004). Chilling effects were tested by asking if participants avoided writing or speaking about particular topics (CFX_avoidance), if they had changed their online behaviour (CFX_change) and other questions regarding violation of privacy, scope and approval of surveillance. These questions, as well as those regarding surveillance concern were based on the questionnaire by writers association PEN America Center (2013). To relate identification and the feeling of injustice and illegitimacy of mass surveillance to protest behaviour, future protest tendencies (willingness to participate in discussions, demonstrations, petitions, boycotts, pickets and others) as well as past collective action were determined via open response format. Additionally, the reasons why people did not take part in protests so far (attention, promise, more_important) were recorded via 4-point Likert items. After asking the political attitude of participants, open-ended questions of what groups are part of Internet surveillance (group: What groups, do you think are part in Internet surveillance. Please name those, who come to your mind in the textboxes) and against whom or what current protests are directed (outgroup: In your opinion, against whom or what are the current protests directed) were requested, to identify the outgroup definition of the participants. Furthermore, a question on how sure participants were that every group has been named was posed (naming: How sure are you, that you named all involved and responsible groups). In a separate survey at the end, the possibility to enter a price draw and getting a feedback on the study’s results was offered. The mean time taken to complete the survey was approximately 11 minutes.

The survey was put online on June 15th 2014 until June 23rd 2014 and distributed via mailing lists (e.g. to students and staff members of Philipps Universität Marburg), Twitter and
Facebook. The dropout rate of 63% was normal for an online survey (see e.g. MacElroy 2000).

4.3. Description of statistical methods

First, the data set was adjusted using a data screening and then searched for spikes, violations of the normal distribution, missing and abnormal values (e.g. outside of the scale rank, see 5.1 Datascreening). All calculations have been conducted with IBM SPSS Statistics 20 for Mac OSX and the PROCESS v212 macro by Hayes (2013). To analyse the collected data, the following statistical methods were used.

4.3.1. Factor Analysis
To get insight on the latent structure based on the different manifest variables of the questionnaire, an exploratory factor analysis was conducted (Maximum Likelihood analysis with promax rotation). In order to reduce the variable set, variables that are independent from each other are sought and grouped (see Eckey et al. 2002; Field 2009).

4.3.2. Regression analysis
The purpose of a linear regression analysis is to predict a dependent variable by one or more independent variables (linear or multiple regression). This allows the prediction of quantitative relations of predictor and criterion variable, and the values of dependent variables. To test hypotheses 1 and 2, the influence of outgroup definition and ingroup identification on protest behaviour, a mediated regression analysis was calculated. A mediator effect exists if the relationship between a predictor and a criterion is partially or fully mediated by a mediator variable. To verify hypothesis 3, the influence of concern about surveillance and identity as being surveilled on chilling effects of Internet surveillance controlled for several other variables, a hierarchical multiple regression was conducted.
05 Data Screening and Test of Assumptions

In this chapter the data are screened for accuracy, missing data and outliers (according to Tabachnick & Fidell 2007) before the described statistical methods are applied.

5.1. Data Screening

5.1.1. Test of accuracy and missing data

To test accuracy and plausibility, the data set was reviewed by manually checking the output file of the survey software and the descriptive statistics for abnormal values. Seven participants reported an implausibly big number of past protests (999), which were exchanged with the mean of the corresponding variables (10, 2 and 1). Of originally 1306 people that completed the questionnaire, 169 were deleted during the data screening process, inter alia because of taking less than 100 seconds for the whole questionnaire and/or not answering any questions.

An analysis for missing data showed the earlier mentioned six participants that did not answer the question about their gender and 14 not giving their age. These cases were excluded in the calculation of Hypotheses 1 and 2. Seven missing data points of political attitude were set to the mean (4) to maximise sample size and optimise the power of statistical tests (Tabachnick & Fidell 2007; Cohen 1988). Five participants did not indicate their education and were therefore excluded in the testing of Hypotheses 1 and 2. The open answer questions about who takes part in Internet surveillance and against whom the protests are directed against produced rather large quantities of missing data either because people did not know what to answer or because they did not want to (see 6.1. Descriptive Results).

5.1.2. Outliers

Univariate outliners were determined using standardised z-values. According to Tabachnick & Fidell (2007), univariate outliers are existent when \(z \geq 3.29\). Multivariate outliers are identified using Mahalanobis distance, which describes the squared deviation of a value in ratio to its variance. They appear if the probability of such a deviance falls beneath the probability of error \((p < .001)\). Because the present sample is normally distributed (see 5.3.2.), univariate and multivariate outliers exist, but do not have to be deleted, if their statistical value is realistic.

\(4\) Calculations with replaced missing values for age did not show any differences in results.
Because outliers were within the possible answer range, they were not deleted.

5.2. Factorial Structure of Items & Reliability Scales

To reduce the number of variables and built scales, a principal component analysis with Promax rotation was conducted to test whether the items of the questionnaire can be grouped. In regards to the content of the items, the factors fit well with the exception of chilling effects loading on two different factors. However, these items were grouped into one scale for content reasons. See Table B5 in annex for the factor structure.

Based on the factorial structure, various scales were calculated, combing items that measure similar characteristics and match with regards to content. The Protest scale combines the participant's tendencies to engage in collective action (discussion, demonstration, online petition, boycotts, pickets, other; \( \alpha_c = .802 \), mean=2.3, SD=.737) and ingroup identification (IG_ID, \( \alpha_c = .719 \), mean=2.34, SD=.848) the variables IDsur and connected. In addition, scales were calculated for collective injustice (coll_injust, \( \alpha_c = .751 \), mean=1.72, SD=.597) with the variables CFX_acceptance_reverse, CFX_privat and concern, and CFX including all items regarding chilling effects (\( \alpha_c = .754 \), mean=2.27, SD=.482). According to DeVellis (2003) a Cronbach’s Alpha of \( \alpha_c > .7 \) is acceptable and above \( \alpha_c > .8 \) good.

5.3. Testing assumptions of Regression Analysis

In order to use regression analysis various assumptions have to be confirmed.

5.3.1. Sample size

Although technically it is not an assumption, an adequate sample size is important to get a reliable regression model. However, there are no specified standards when a sample is big enough. Some authors suggest N=10 participants per estimated variable (Field 2009), others advise N>50+8m (m=number of IVs, Tabachnick & Fidell 2007). In the assumed model three predictors for hypothesis 1 and 2, respectively one for hypothesis 3 plus six control variables are estimated. Therefore, the final sample size of N = 1137 is more than enough.

5.3.2. Test of normal distribution

Regression analysis requires a normal distribution of the variables. Because SPSS does not allow testing multivariate normal distribution, a test of univariate normal distribution is advised (Field 2009). This is a necessary – but not sufficient – condition for a multivariate normal distribution (Eid et al. 2011; Tabachnick & Fidell 2007). According to West, Finsch
& Curran (1995), normality is present, when the critical value of skewness (|2|) and kurtosis (|7|) is not reached. Except for the three variables that measure the number of past protests and Internet_consumption, all variables are assumed to be an approximation of the normal distribution, so that normality is not violated. This is sufficient, since the methods used are robust to slight deviations from the normal distribution (see e.g. Bortz 1999). See Table B1 in the annex for a detailed overview of the values of the individual variables.

5.3.3. Normally Distributed Random Errors & Non-Zero Variances
To test normal distribution of errors, histograms and normal P-P plots of standardised residuals were plotted and are shown in annex B3. They indicate that the data contain approximately normally distributed errors. The data also meet the assumption of non-zero variances, which are presented in Table B1.

5.3.4. Linearity
To test linearity, locally weighted Scatterplot Smoother (LOWESS, Cleveland 1979) was used. A fit line was inserted in a scatter plot of standardised residuals, which represents the relationship between these two variables (Eid 2011). All estimated relationships can be described as linear as the scatterplots presented in annex B3 show.

5.3.5. Homoskedasticity
Homoscedasticity was tested by plotting the standardised residuals and the standardised predicted value of the dependent variable in hypotheses 1 and 2 (Protests scale) and hypothesis 3 (the scale CFY). According to the scatterplots shown in annex B3, homoskedasticity can be visually confirmed.

5.3.6. Independent errors
Another assumption of regression analysis is that residuals have to be uncorrelated. This is tested with the Durbin-Watson test, whereby a value of 2 means that the residuals are independent (Field 2009). With a score of 1.988 for hypothesis 1, 1.996 for hypothesis 2 and 2.117 for hypothesis 3, independence of errors is given.

5.3.7. Non-Multicollinearity
Multicollinearity exists, when different predictor variables correlate highly (r<.80) with each other, the variance inflation factor (VIF) is greater than 10 and the Tolerance less than 0.1 (Field 2009). Tests found a confirmation of the assumption of non-multicollinearity and indicated that it was not a concern. See annex B4 for a list of these values.
06 Results

In this chapter the results of the conducted online survey are presented. At first, the data are analysed descriptively, before the results of the regression analyses to test hypotheses 1, 2 and 3 are presented.

6.1. Descriptive Results

To test hypothesis 1, subjects were asked to answer open-ended questions about who participates in online surveillance (group) and against whom protests are directed (outgroup). Six text fields were given to answer each question, in order to collect data about the outgroup definition. The missing rate of all text fields (12 per participant) of 78.0% (group) and 75.5% (outgroup) was extremely high. On average 2.86 answers (SD=1.98) for group and 4.30 (SD=1.57) answers for outgroup were missing per test subject. See Annex B2 for a detailed table. These missing values were used to specify outgroup definition (OGDef) in hypotheses 1 and 2. See 6.6. and 7.1.5. for a short content analysis of the answers.

In an additional question, participants were asked how sure they are about whether they had named all groups participating in surveillance. With a mean of 3.63 (SD=.88) on a 4-point item, participants tended to be very uncertain about this issue. The mean of identification with the group of surveilled persons (IDSur) was 2.36 (SD=0.92), the mean of connection with surveilled people (connected) was 2.32 (SD=1.00). The means of tendencies to protests were similar to each other (discussion: 2.41, SD=0.97; demonstration: 2.41, SD=1.00; online_petition: 1.87, SD=0.96; boycotts: 2.24, SD=1.01; pickets 2.96, SD=0.98, other 2.21, SD=1.25).

In hypothesis 3 the variables concern (mean=1.80, SD=.797) and IDsur were combined in a scale to predict the amount of chilling effects (CFX, mean = 2.27, SD=.482).

All hypotheses were controlled for various variables (see 6.2 through 6.4 for details). For a full report on descriptive results of all variables see Table B1 in the annex.
6.2. Results of Regression Analysis I (Hypotheses 1)

Firstly, bivariate correlations between outgroup definition (OGDef), protest behaviour (Protestscale) and ingroup identification (IG_ID) were calculated. See Table 1 for the results. Then a regression analysis via the PROCESS macro was conducted to examine the relationship between those variables. For this, an interaction term of the centralized scales was calculated, to examine any additional effect of the combined variables (Field 2009). Due to missing data in various variables (e.g. age), the sample size was reduced to N=1115\(^5\).

Results show that protest behaviour is not directly explained by outgroup definition (B=-.0043, SE=.013, t(1114)=-.343, p=.73), but by ingroup identification (B=.271, SE=.026, t(1114)=10.4, p.<.001). Outgroup definition explains protest behaviour only through the mediating variable ingroup identification. The regression of OGDef onto IG_ID is significant with B=.057, SE=.014 t(1114)=3.99, p=.001. When controlled for IG_ID the explaining effect of OGDef disappears as an additional bootstrap analysis with m=1000 samples shows (CI\(_{95}\).=-.029, CI\(_{95}\).=.021). The interaction term does not significantly explain any additional variance (B=.0243, SE=.014, t(1114)=1.69, p=.092).

The calculation was controlled for age, gender, Internet consumption, education, political attitude and intensity. The last two mentioned variables have a significant influence on the model (political attitude: B=.0819, SE=.0131, t(1114)=6.25, p.<.001; intensity: B=.2127, SE=.027, t(1114)=47.86, p.<.001).

See Figure 1 on the next page for the mediation model of Hypothesis 1.

Table 1

<table>
<thead>
<tr>
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<th>Protestscale</th>
<th>OGDef</th>
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<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IG_ID</td>
<td>.465**</td>
<td>.232**</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Coll_Injust</td>
<td>.507**</td>
<td>.209**</td>
<td>.499**</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1: Bivariate correlations between variables / scales of Hypotheses 1 and 2; ** sign. p<.001

\(^5\) Calculations with the full sample size, replacing the missing values with the mean, only show slight differences.
6.3. **Results of Regression Analysis II (Hypothesis 2)**

To analyse the effect of collective injustice (*coll_injust*) on protest behaviour mediated by the ingroup identification bivariate correlations (see Table 1) and another mediated regression analysis were conducted. Similar to hypothesis 1, an interaction term of collective injustice and ingroup identification was calculated and several participants were excluded due to missing values (N=1115).

Results indicated a significant correlation between collective injustice and protest behaviour ($B=.335$, $SE=.0393$, $t(1114)=8.528$, $p<.001$), a significant effect of collective injustice on ingroup identity ($B=.4415$, $SE=.042$, $t(1114)=10.525$, $p<.000$), and a significant effect of the interaction term on protest behaviour ($B=.1027$, $SE=.0352$, $t(1114)=2.918$, $p=.0036$). See Figure 2 on the next page for a figure of simple slopes of the regression of collective injustice on protest behaviour with a low versus high ingroup identification.

The calculation was controlled for *age*, *gender*, *Internet consumption*, *education*, *political attitude* and *intensity*, of which the last two are statistically significant (*political attitude*: $B=.0614$, $SE=.0127$, $t(1114)=4.826$, $p<.001$; *intensity*: $B=.116$, $SE=.0278$, $t(1114)=4.17$, $p<.001$). See Figure 3 for the full mediation model of Hypothesis 2.
Figure 2: Simple slopes of the relation between collective injustice and protest behaviour as a function of ingroup identification (± 1 SD from the mean).

Figure 3: Simple Mediation Model for Collective Injustice, Ingroup Identification, the interaction term and Protest behaviour in the form of a statistical diagram. The bivariate correlation between Collective Injustice and Protest behaviour is in parenthesis. n.s. not sign., * sign. p<.05; ** sign. p<.001
6.4. Results of Regression Analysis III (Hypothesis 3)

Hierarchical multiple regression was used to predict online behaviour in terms of refraining from talking or writing about controversial topics online (i.e. show chilling behaviour) based on the identification as being surveilled (IDsur) and the individual concern about surveillance (concern). Various control variables (age, gender, education, internet consumption, political attitude) were included in the calculation. The results of the regression using stepwise method indicated that the model significantly accounts for 39.3% of the criterion’s variance (R=.627, SE=.377, F(5,1109)=143.814, p<.001), whereby concern on its own explains 32.9% (R²change=.329) and IDsur 1.7%. However, the analysis shows that not only concern and IDsur significantly predict the value for chilling effects, but also the control variable Internet consumption⁶ (p<.05). See Table B6 in the annex for further information.

6.5. Further Results

Next to the examination of the hypotheses, other relationships were tested.

Chilling effects and the number of past protest against surveillance pre- and post-Snowden have a significant correlation (r=.264, B=-1.61, SEₜ=.174, β=-.264, t(1135)=-9.229, p<.001), as well as chilling effects and protest tendencies (r=.466, B=.712, SEₜ=.04, β=.466, t(1135)=17.743, p<.001). Additionally, the relationship of chilling effects and the item attention is significant (r=.314, B=-1.06, SEₜ=.95, β=.314, t(1135)=11152., p<.001). The correlation of chilling effects and the place of birth is not significant (east or west Germany; r=.009, B=.015, β=.009, p=.789) nor is the correlation of the place of birth with protest tendencies (r=.027, B=-.067, β=.027, p=.412).

The intensity of informing oneself about the surveillance scandal has a significant influence on protest tendencies (r=.405, B=.355, SEₜ=.024, β=.405, t(1135)=14.938, p<.0001), just as political attitude (r=.288, B=.141, SEₜ=.014, β=.288, t(1135)=10.132, p<.0001) and Internet consumption (r=.142, B=.027, SEₜ=.006, β=-.142, t(1135)=-4.825, p<.0001).

⁶ The other control variables do not have any effect in the model.
6.6. Qualitative Content Analysis of Outgroup Definition

After screening the recorded names of groups that are supposedly participating in Internet surveillance and against whom protest is directed to, an overall number of 1673 (28.2% of all group items) and 1502 (32.5% of all outgroup items) usable answers were categorized based on their content (Mayring 2010). The top five groups taking part in Internet surveillance mentioned were intelligence agencies (4.3% of all 6822 answers in this item), private companies (4.0%), police (2.2%), governments (2.0%) and the office for protection of the constitution (Verfassungsschutz, 1.7%). According to participants, protests were directed against the NSA (4.1%), the German government (3.1%), surveillance (2.7%) and intelligence agencies (2.0%). See Table B6 for full lists.
07 Discussion

In this part of my master’s dissertation, the main results presented in chapter 6 are summarised and discussed. Against the theoretical background of preceding studies, the results are interpreted before the strengths and limitations of this study are explained. Practical implications and future directions will be presented before a conclusion is being drawn.

7.1. Main Results

Here, the main results of each hypothesis and further findings are discussed and interpreted before a short qualitative content analysis of the outgroup definition is conducted.

7.1.1. Hypothesis 1

As the results show, the prediction of Social Identity Theory about a two-way relationship between collective identity, which is measured by ingroup identification (Simon et al. 1998), and participation in protest is confirmed by this study. In accordance with the results of recent research (e.g. Stürmer & Simon 2004), individual behaviour is influenced by group norms when group membership becomes salient (Simon & Klandermans 2001) and ingroup identification becomes a predictor for the willingness to protest. Identification with an ingroup depends on the differentiation from a relevant outgroup (Haslam & Turner 1995), which is indicated in this study by the significant correlation between ingroup identification and outgroup definition. However, according to the results of this study, the definition of an outgroup itself does not have any direct effect on protest behaviour. Therefore, the focus has to be directed towards ingroup identification as a predictor rather than outgroup definition when trying to predict the willingness to protest.

Existing social psychological research regarding protest behaviour deals with a clear ingroup versus outgroup constellation. The unusually high number of missing answers in this study when having to name the involved groups in surveillance or the targets of protests and the great uncertainty shown when asked if all participating groups have been mentioned, suggests a very unclear definition of an outgroup. See 7.1.5. for a brief content analysis of the answers given. Outgroup definition influences the willingness to participate in collective action against Internet surveillance via ingroup identification as the results suggest.

The reasons for the relatively low participation in protests against Internet mass surveillance in Germany deduced from the results of the study are that there is a low identification with an
ingroup and as a victim of surveillance on an individual level. Digital surveillance is hardly visible and there are rarely specific victims of Internet surveillance, making Internet monitoring even more intangible and abstract. Because many people do not think about being surveilled, have never had any negative side effects of online surveillance themselves or have never heard personal stories from victims of surveillance, ingroup identification cannot form. Even if an ingroup exists and ingroup identification is present, the ingroup’s position has to be judged as being strong, in order to express emotions and protest against an outgroup (Mackie et al. 2000). As past protests in Germany have mostly been framed against surveillance itself or foreign intelligence agencies, protesters are not in a strong position for emotional reactions to arise.

7.1.2. Hypothesis 2

The results of the calculations for hypothesis 2 confirm the findings of previous studies about the relationship between collective injustice and the willingness to protest (van Zomeren et al. 2011; Klandermans 1997; Mackie et al. 2000) with reference to collective action against Internet surveillance. A collective feeling of injustice not only has an influence on the relationship of ingroup identification and protest behaviour but also predicts the willingness to protest independently. The results of the significant interaction show that high identifiers with a high degree of collective injustice are more willing to protest than low identifiers thus confirming previous studies (Ellemers et al. 1997). The significant interaction states that the effect whether someone has a high or low degree of collective injustice on protest behaviour depends on whether someone is a high or low ingroup identifier. This confirms studies, that show that through high rather than low ingroup identification, disadvantages of the ingroup are perceived as unfair and illegitimate collectively, which leads to politicized collective identity which in turn predicts protest behaviour (Mummendey et al. 1999; Wright et al. 1990). People perceive a discrepancy between their demand for data protection and online privacy and the status quo, where these civil rights are threatened according to the Snowden leaks. Therefore, relative deprivation should develop within individuals and groups and predict collective action against surveillance (Wright et al. 1990). However, it seems that relative deprivation does not emerge because protests have not had high attendances so far. This might be a consequence of having low importance to the general public or people not perceiving any discrepancy.

7 In fact, media reports in Germany that only two namely victims have been detected: German chancellor Angela Merkel (Rawlinson 2013) and student Sebastian Hahn for hosting a server for the TOR software, which serves for enabling online anonymity (Kampf et al. 2014).
Surveillance is perceived as illegitimate when it is aimed at ordinary citizens and does not function to protect them from threats (Dinev et al. 2007). However, as mentioned in the previous section, people do not identify themselves as being surveilled. Ingroup identification and any feeling of collectiveness and common injustice do not arise, which is reflected in low participation in anti-surveillance protests. Even with recent revelations about governmental eavesdropping on ordinary citizens, the feeling of collective illegitimacy seems relatively low. People require knowledge that other ingroup members perceive the situation as illegitimate and feel disadvantaged (Klandermans 1997) to experience collective support and react upon the collective disadvantage (Mackie et al. 2000). Because Internet surveillance is hidden and related to single individuals or smaller groups, a broad common feeling for injustice and illegitimacy is hard to experience. Hence, protests so far have not been well embraced.

7.1.3. Hypothesis 3

The present study shows that chilling effects do not only exist within the offline world (e.g. White & Zimbardo 1975), but that online surveillance too has behaviour changing effects that inhibit individuals from speaking and writing freely on the Internet. These results confirm recent studies (PEN American Center 2013; Electronic Frontier Foundation 2013; DIVSI 2014) and, for the first time, demonstrate correlative relationships of chilling effects of Internet surveillance and their triggers beyond the descriptive nature of earlier studies. The results of the calculations show that the degree of concern about Internet surveillance and the identification as a victim of surveillance can be linked directly to online chilling behaviour. This implies that when people worry about being surveilled online and are aware of being watched by intelligence agencies or other governmental institutions, they refrain from acting illegally. However, this behavioural confinement extends onto legal but controversial (i.e. not conform to the government’s opinion) topics and practices in order to circumvent reprisal, which has been shown in numerous studies regarding off- and online surveillance. This development is highly detrimental to the political culture in society because individuals refrain from actively engaging in public social and political life, if their opinion is considered out of the norm. Political opposition is suppressed because surveillance is not distributed equally across the political spectrum (Best & Krueger 2008). This leads to a politically uniform environment and a break of the ideal of equal consideration (e.g. Dahl 1989). The results of hypothesis 3 allow many practical implications, which are discussed in detail in 7.3.

8 The core element of the Principle of Equal Consideration of Interests “is that we give equal weight in our moral deliberations to the like interests of all those affected by our actions.” (Singer 2011: 20).
7.1.4. Interpretation of further results

In addition to the relationships between variables stated in the three main hypotheses, other interesting correlations were analysed. As the definition of chilling effects suggests, these effects have an impact on both past protest behaviour and the tendency to avoid protesting out of the fear of attracting too much attention to oneself. This implies that the more chilling behaviour is demonstrated, the lower the attendance at protests. Additionally, participants show constrain in their potential to act upon their civil liberties by legally protesting, which fits very well into the theoretical background of chilling effects. Interestingly enough, the relationship between chilling effects and future protest tendencies is positive. The more chilling effects influence an individual’s behaviour, the more she is willing to protest against online surveillance in the future. This relationship is counterintuitive, because chilling effects are supposed to suppress conspicuous behaviour, which include protests. Further studies are needed to shed light on this relationship.

In addition to chilling effects, several other variables are positively correlated with future tendencies to protest against Internet surveillance. The intensity of informing oneself with the help of media reports concerning this matter, political attitude of participants and Internet consumption all have a positive relationship with protest tendencies. These results are in line with previous studies reporting on the new intensive information culture of activists using the Internet and its connection to willingness to protest (e.g. Garrett 2006) and the correlation of protest behaviour and political orientation (e.g. Duncan 2012).

7.1.5. Qualitative Content Analysis of Outgroup Definition

Results of the question regarding the identity of the target of past protest show the suspected pattern, that a great variation in the perception of an outgroup exists. With 16.7% of all answered text fields (4.1% of all text fields), the NSA is the most mentioned target of protests, which is most probably due to the fact that the NSA is one of the world’s biggest and most advanced intelligence agencies and receives extensive media attention because of the documents leaked from their systems. Secondly, the German government (12.8%, respectively 3.1%) is mentioned as a target of protests. This is evident because of the inactivity of the German government when it comes to elucidating the spying affair. The third and fourth most mentioned targets were ‘surveillance’ (10.1%; 2.7% of total) and ‘intelligence agencies’ (8%; 2% of total), which cannot be seen as a clear outgroup and shows the ambiguity in definition of an outgroup. Regarding protest against surveillance, it would be more effective to protest against the implementer of surveillance (i.e. particular governments) than against the technique or concept of surveillance itself. As intelligence agencies are inherently non-
transparent and operate in secret, it is difficult to define them as a clear outgroup against whom protests would be effective. The variety of the answers show, that a clear image of an outgroup regarding the anti-surveillance protests is not given. See 7.3. for further interpretations on these results and Annex B7 for full tables of answers.

7.2. **Strengths and Limitations of the present master’s dissertation**

While the findings of this study make a significant contribution to the literature on protest behaviour against Internet surveillance and the predictors of chilling effects, a number of limitations must be taken into account.

This study is the first of its kind that deals with outgroup definition in regards to protest behaviour and the first one to address protest behaviour against Internet surveillance revealed since mid-2013. For this reason, the study faces several constraints. For one, a limitation and potential source of error is the operationalisation of outgroup definition itself. Open-ended questions were asked to determine if the re exists a clearly defined outgroup to target protests towards. These questions were largely unanswered. It is impossible to find out whether study participants did not complete these questions due to lack of motivation or ignorance.

Another limitation regards statements about correlations versus statements about causalities because the correlational nature of the findings forbids claiming causal relationships. Only correlative relationships were described, which state that an effect between two variables exists, but not whether there is a causal relationship, i.e. whether one variable is the consequence of the other. Though, because the intention of the study was to examine and report correlational relationships, this is a negligible limitation.

A clear strength of the study is its sizable and heterogeneous sample. With N=1137 participants, an almost balanced gender ratio (50.4% male, 49.1% female) and a mean age of 28.5 years (SD=8.66) a well-assorted sample was achieved. However, due to the distribution of the online survey, the sample is highly educated as 93.9% have an A-level or graduated university, which can be seen as a limitation. The lack of representativeness seems to limit the study too, even though the survey was not aimed to be representative. While representative studies are important to estimate distributions within society, representativeness is not required for the examination of correlations. Since the present work addresses relationships between psychological constructs and behaviours, representativeness was not of importance.
Due to the restrictions of words in this thesis, various related topics such as the group’s perception of efficacy when engaging in protest (Klandermans 1997) or privacy issues (surveillance commonly infringes privacy) (e.g. Boyle & Haggerty 2009) had to be left out.

7.3. **Practical implications and Future Directions**

From the results of the present study a number of practical implications for the active protest movement against Internet surveillance as well as for future research arise.

For politically active NGOs in Germany, which organize protests against Internet surveillance the results can be important in terms of framing future collective actions. These NGOs should not frame protests against the practices of foreign intelligence agencies or governments, but rather create direct references to the current and past German governments, which have been involved in the implementation of surveillance. Protests must have a clear link to German institutions that can be influenced directly rather than focussing on the NSA or the GCHQ on which protests in Germany do not have any affect. Thus for example, the involvement of the German BND in the worldwide spying affaire and its relationships and modes of operation with the NSA and other foreign intelligence agencies, which were revealed just recently (Becker, Gude, et al. 2014; Becker, Poitras, et al. 2014), must be brought more into the public sphere, not only to stimulate a debate, but to indicate a clear outgroup, direct protests towards it, thereby strengthening the ingroup identification. With continuing media reporting on surveillance methods of the intelligence complex, intensity of information can be sustained and increased. This would have a positive effect on the dimension of anti-surveillance protest in Germany through the significant relationship between intensity of information and ingroup identification as results of this study suggest. Though recent calls for demonstrations start focusing more on the German government (Freiheit Statt Angst 2014), the wording still remains vague and not directed towards a clear outgroup.

Additionally, the feeling of collective injustice has to be put more into focus to fuel protests, as the results of hypothesis 2 suggests. When German citizens collectively feel that Internet surveillance is unjustly and illegitimately executed not only against people of interest but also against ordinary citizens, depriving them of basic civil liberties, protests will arise more likely. Through media reports about ordinary individuals being targeted by surveillance methods, awareness can be increased. A generalisation of these individual stories onto larger social groups (e.g. activists) can create a collective feeling of injustice, which then increases willingness to protest.
With the continuing existence of massive surveillance by intelligence agencies, chilling effects will persist and further emerge, because people can never be sure about whether they are being surveilled or not and therefore change their behaviour in advance to avoid reprisal. Complete elimination of chilling effects would only be possible, if intelligence agencies would be closed down so that citizens can express their opinions freely without having to fear governmental backlashes. Admittedly, this scenario where all intelligence agencies worldwide will be shut down is rather unrealistic, but various memoranda deal with this topic domestically (e.g. Reuter & Stognienko 2014; Humanistische Union 2013). Another way to reduce chilling effects follows from the results of this study that the dimensions of chilling effects correlate with the concern about surveillance. By maximising the transparency of intelligence agencies, concerns could be reduced, which would decrease chilling effects as well. Though this is a legitimate demand, it is a contradictio in adjecto between the for intelligence agencies necessary secrecy and the demand for maximum transparency (Hechelhammer 2014), which cannot be overcome by only a few reforms (Reuter & Stognienko 2014). Activities of intelligence agencies and police are legitimated through visibility and assessability by citizens (Albrecht 2014), who need to have confidence in intelligence agencies and have to be sure about whether their privacy will be violated or not. By making sure that espionage techniques are exclusively used on criminals and terrorists and that this procedure is regulated by independent public courts, intelligence agencies could regain the trust of citizens, thereby decreasing the negative psychological effects of Internet surveillance.

For any future studies in the field of protest behaviour against Internet mass surveillance and the chilling effects of online surveillance the issues and limitations raised in the previous section should be eliminated as much as possible. Future studies should especially focus on the operationalisation of an outgroup and use other items to measure its dimensions, to reproduce and confirm the findings of this study, raise its external validity and further examine protests without a clearly defined outgroup. An examination of how trust in the state is related to anti-surveillance protests would also be interesting, because some authors suggest an instinctive trust of citizens in the state which impedes protest (Ullrich 2014) whereas others report on a reduction of faith in the state in relation to the NSA revelations (Weilmeier 2013). Additionally, future studies should examine the feeling of powerlessness in the face of ubiquitous surveillance and alternative predictors of chilling effects than concern and identification as being surveilled.

Because this study only reports on correlational relationships, a target for future studies could be the proof of causal relationships between outgroup definition, ingroup identification,
collective injustice and protest behaviour in regards to protest against Internet surveillance, which can be confirmed by longitudinal data.

Earlier studies show that the purpose of surveillance is important when assessing the illegitimacy and invasion of privacy of surveillance (Alge 2001; Dinev et al. 2007). It would be interesting to see a focus of future research on the differentiation of the purpose of Internet surveillance. Does the willingness to protest against surveillance change if surveillance perceived as beneficial to society? What are the impacts on chilling effects if the purpose of surveillance is framed differently?

7.4. Conclusion

The aim of this master’s dissertation was to examine the protests against Internet surveillance in Germany that have been present for decades, but have been increasing with the revelations of Edward Snowden on the dimensions of surveillance in June 2013. Additionally, chilling effects of surveillance, which influence, change and restrict people’s (online) behaviour were analysed. Through an online survey, it was shown, that outgroup definition has a significant effect on ingroup identification, which itself highly correlates with protest behaviour. However, no direct effect between outgroup definition and protest behaviour was found. Furthermore, a meaningful effect of collective injustice regarding the implementation of Internet surveillance on protest behaviour was identified. In the second part of the study, it was demonstrated that the concern about Internet surveillance and the identification as being surveilled correlates with the degree of chilling behaviour shown by Internet users.

These results have practical relevance, especially against the background of increasing protests against Internet surveillance. Future protests should focus on specifying a clear outgroup to improve ingroup identification in order to increase protest participation. With the recent revelations that the BND is deeply involved in the spying affair and the proof of cooperating with the NSA (Becker, Poitras, et al. 2014), protests can more easily be directed towards domestic intelligence agencies, thereby simplifying the definition of the outgroup.

With continuous reports on Internet surveillance techniques of the intelligence complex and mass surveillance increasing rapidly despite the current public debate (United Nations 2014), this topic is more relevant than ever and will continue to outrage citizens worldwide who will be protesting for their civil rights. The present study has made a significant contribution to the scientific examination of the protests against and psychological aspects of online mass surveillance taking outgroup definition into account and makes clear that further research on these topics is necessary.
08 Bibliography


Bentham, J., 1791. *Panopticon Or the Inspection House*, Available at: https://encrypted.google.com/books?id=NM4TAAAQAAJ.


Rawlinson, K., 2013. NSA surveillance: Merkel’s phone may have been monitored “for over 10 years.” Available at: http://www.theguardian.com/world/2013/oct/26/nsa-surveillance-brazil-germany-un-resolution [Accessed July 13, 2014].


09 Annex

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Annex A

A1 Questionnaire English

Sources of questions are in parenthesis, J.N. are questions developed by the author himself.

Dear participant,

My name is Johannes Nau. I am currently working on my master’s dissertation on Internet surveillance and protest behaviour in Peace and Conflict Studies at Philipps University Marburg /Germany and the University of Kent /United Kingdom.

In June 2013 Edward Snowden revealed one of the biggest surveillance incidents in history. In Germany as well as in other countries protest against this indiscriminate surveillance of citizens has arisen.

This survey is designed to investigate your attitudes about Internet surveillance and protest behaviour.

This survey is about your opinion. Therefore, there are no right or wrong answers. Please answer as spontaneous as possible. Your data will be treated anonymously and confidentially.

The survey will take approximately 5 minutes.

At the end of the survey, you will have the possibility to win one amazon.de voucher (1x50€, 2x25€). For this you have to leave your email address in a separate survey.

If you have any questions, feel free to contact me: jn257@kent.ac.uk

Thank you in advance for your support.

Johannes Nau

---

• How old are you?
  ___ Years

• Are you
  o Male
  o Female

• How many hours do you use the Internet on a daily basis?
  ___ Hour(s)

• What is your highest education?
  o Kein Abschluss
  o Hauptschulabschluss
  o Realschulabschluss/Mittlere Reife
  o Abschluss der allg. bildenden polytechnischen Oberschule in der ehemaligen DDR
  o Abitur
  o Abgeschlossenes Studium (Bachelor, Master, Diplom, Magister, o.ä.)

• What is your nationality?
  o German
• Other namely _____

<federal_state>
  • If you marked “German and are born in Germany: in what federal state were you born? _____

<intensity> (PEN American Center 2013 - modified)
  • How closely are you following news stories about Internet surveillance in Germany?
    o Very closely,
    o closely,
    o a little,
    o not at all

<concern> (PEN American Center 2013 - modified)
  • In general, how worried are you about current levels of government surveillance of Germans?
    o Very worried,
    o worried,
    o a little worried,
    o not at all

<LHsur> (J.N.)
  • How likely do you think it is that you are being surveilled when using the Internet?
    o Highly likely,
    o likely,
    o not too likely,
    o not likely at all

<IDsur> (Stürmer & Simon 2004 - modified)
  • How much do you identify with the group of people being surveilled
    o Extremely,
    o very much,
    o a little,
    o not at all

How much do you agree with the following statements?

<belonging> (Stürmer & Simon 2004 - modified)
  Belonging to the group of surveilled persons, does not affect how I see myself

<connected> (Stürmer & Simon 2004 - modified)
  I feel strong ties with other people being surveilled
    o Totally agree
    o Agree
    o Tend to disagree
    o disagree

<CFX_avoidance> (PEN American Center 2013 - modified)
  • Do you avoid writing or speaking about a particular topic online?
    o Always
    o Often
    o Rarely
    o never

<CFX_change> (PEN American Center 2013 - modified)
  • Have you ever changed your online behaviour (e.g. curtailed or avoided activities on social media) because you thought your communication could be monitored?
    o Changed a lot
    o Changed
    o Changed a little
    o Not changed at all

<CFX_concealment> (PEN American Center 2013 - modified)
  • Do you try to cover or disguise digital footprints (e.g. encryption of emails / hard drive, changed to secure email provider)
    o Always
    o Often
    o Rarely
    o Never
Have you ever refrained from conducting Internet searches or visiting Web sites on topics that may be considered controversial or suspicious?
- Always
- Often
- Rarely
- Never

How concerned are you about the following?

Surveillance is being used to investigate against you

The current level of government surveillance of German citizens

Suppression of free speech and freedom of press
- very concerned,
- concerned,
- not too concerned,
- not concerned at all

Overall, do you agree with the government’s collection of meta and content data?
- Strongly agree,
- agree,
- disagree,
- strongly disagree

If you knew that the government had collected data about your telephone or Internet activity, would you feel offended that your personal privacy had been violated?
- Very offended
- Offended
- A little offended
- Not offended at all

How often have you taken part in a protest against/for something?

How often have you taken part in protests against surveillance?

How often have you taken part in protests after the revelations of Snowden?

If not, did you not take part in protests, why?

out of the concern of attracting attention?

Because I do not see the point

Because there are more important things than Internet surveillance
- Very true
- True
- A little true
- Not true at all
To protest against Internet surveillance, I would participate in

<Discussions>
<Demonstrations>
<Online petitions>
<Boycotts>
<Pickets>
<other>

o Yes definitely
o Pretty sure
o Probably not
o Not all all

(Becker & Wright 2011)

<politAttitude> (Survey Institute Sociology Martin-Luther Universität Halle-Wittenberg: http://www.soziologie.uni-halle.de/langer/pdf/meth1/xenhalle.pdf)

Many people use words ‘left’ and ‘right’, when talking about different political attitudes. If you think about your own attitudes, how would you classify yourself on a scale from 1 (very left) to 10 (very right)? The interim values are to classify your assessment.

o left 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10 right

<missingGroup> (J.N.)

• What groups, do you think are part in Internet surveillance. Please name those, who come to your mind in the textboxes.

_____, _____, _____, _____, _____,

<naming> (J.N.)

• How sure are you, that you named all involved and responsible groups?

o Very sure
o Sure
o A little sure
o Unsure

<missingOG> (J.N.)

• In your opinion, against whom or what are the current protests directed?

_____, _____, _____, _____, _____, _____.

Thank you for taking the time to participate in my survey. After the click, you will be redirected to an external website where you can indicate your email address to in the competition. Additionally, you have the possibility to get informed about the results of the study.
A2 Questionnaire German

Liebe Teilnehmerin, lieber Teilnehmer


Diese Umfrage wurde erstellt, um Ihre Einstellungen gegenüber Internetüberwachung und Protestverhalten zu untersuchen.


Diese Umfrage wird voraussichtlich 5 Minuten dauern.

Am Ende der Umfrage haben Sie die Möglichkeit, einen amazon.de-Gutschein im Wert von 1x50 oder 2x25€ zu gewinnen. Dafür müssen Sie am Ende in einer separaten Umfrage Ihre Emailadresse hinterlassen.

Sollten Sie Fragen haben, bitte kontaktieren Sie mich unter: email@email.com

Vielen Dank im Voraus für Ihre Unterstützung.

Johannes Nau

• Wie alt sind sie?
  _____ Jahre

• Sind Sie
  o männlich
  o weiblich

• Wie viele Stunden verbringen sie täglich im Internet?
  _____ Stunde(n)

• Was ist ihr höchster Abschluss?
  o Kein Abschluss
  o Hauptschulabschluss
  o Realschulabschluss/Mittlere Reife
  o Abschluss der allg. bildenden polytechnischen Oberschule in der ehemaligen DDR
  o Abitur
  o Abgeschlossenes Studium (Bachelor, Master, Diplom, Magister, o.ä.)

• Welche Nationalität haben sie?
  o Deutsch
  o Andere, nämlich: _________

• Wenn Sie „Deutsch“ markiert haben und in Deutschland geboren wurden: in welchem Bundesland wurden Sie geboren?
  _______
Wie intensiv folgen Sie den Nachrichten über Internetüberwachung in Deutschland?
- sehr intensiv,
- intensiv,
- wenig intensiv,
- gar nicht intensiv

Wie beunruhigt sind Sie im Allgemeinen über das aktuelle Ausmaß der Überwachung durch Regierungen?
- sehr beunruhigt,
- beunruhigt,
- wenig beunruhigt,
- gar nicht beunruhigt

Für wie wahrscheinlich halten Sie es, dass Sie überwacht werden, wenn Sie das Internet nutzen?
- sehr wahrscheinlich,
- wahrscheinlich,
- wenig wahrscheinlich,
- gar nicht wahrscheinlich

Für wie wahrscheinlich halten Sie es, dass Sie überwacht werden, wenn Sie das Internet nutzen?
- sehr wahrscheinlich,
- wahrscheinlich,
- wenig wahrscheinlich,
- gar nicht wahrscheinlich

Wie sehr stimmen Sie den folgenden Aussagen zu:

Überwacht zu werden hat wenig damit zu tun, wie ich mich über mich selbst denke.

Ich fühle mich verbunden mit anderen Menschen, die überwacht werden.
- stimme völlig zu,
- stimme eher zu,
- stimme eher nicht zu,
- stimme überhaupt nicht zu

Vermeiden Sie, über ein bestimmtes Thema online zu sprechen oder zu schreiben?
- vermeide immer,
- vermeide oft,
- vermeide selten,
- vermeide nie

Haben Sie Ihr Online Verhalten verändert (z.B. Aktivitäten in Sozialen Netzwerken einschränken oder vermeiden), weil Sie dachten, Ihr Verhalten würde abgehört
- Sehr verändert,
- verändert,
- wenig verändert,
- gar nicht verändert

Verschleiern oder verbergen Sie Ihre digitalen Spuren (z.B. durch Verschlüsselung von Emails / Festplatte)
- immer,
- oft,
- selten,
• Haben sie jemals Internetsuchanfragen oder den Besuch von Webseiten unterlassen, weil der Inhalt als kontrovers oder verdächtig angesehen werden könnte?
  o Immer
  o Oft
  o Selten
  o nie

• Wie beunruhigt sind Sie über das Folgende?

<CFX_investigation>
Überwachung wird genutzt, um gegen Sie zu ermitteln.

<CFX_scope>
Das aktuelle Ausmaß von Internetüberwachung von Deutschen?

<CFX_repression>
Unterdrückung von Meinungs- und Pressefreiheit?
  o sehr beunruhigt,
  o beunruhigt,
  o wenig beunruhigt,
  o gar nicht beunruhigt

<CFX_approval_reverse>
• Allgemein, stimmen Sie dem Sammeln von Meta- und Inhaltsdaten im Internet zu?
  o stimme völlig zu,
  o stimme eher zu,
  o stimme eher nicht zu,
  o stimme überhaupt nicht zu

<CFX_privat>
• Wenn Sie wüssten, dass Daten über Ihre Internetaktivitäten gesammelt werden, würden Sie sich in Ihrer Privatsphäre verletzt fühlen?
  o sehr verletzt,
  o verletzt,
  o wenig verletzt
  o gar nicht verletzt

<NumProtest>
• Wie oft haben Sie bisher an Protesten für/gegen etwas teilgenommen
  _____ Mal

<NumProtestSur>
• Wie oft Haben Sie jemals an Protesten gegen Überwachung im Allgemeinen teilgenommen
  _____ Mal

<NumProSurSnowden>
• Wie oft haben Sie an Protesten gegen Überwachung nach den Enthüllungen von Edward Snowden im Juni 2013 teilgenommen
  _____ Mal

• Wenn Sie bislang nicht an Protesten teilgenommen, haben, warum nicht?

<attention>
um keine Aufmerksamkeit auf mich zu ziehen

<point>
weil ich mir davon nichts verspreche

<more_important>
weil es wichtigeres gibt als Internetüberwachung
  o stimmt,
  o stimmt eher,
  o stimmt eher nicht,
  o stimmt überhaupt nicht
Um gegen Internetüberwachung zu protestieren, würde ich an folgenden Protestformen teilnehmen:

- Diskussionen
- Demonstrationen
- Online Petitionen
- Boykotte
- Mahnwachen
- Andere

- ja, auf jeden Fall
- ziemlich sicher
- wahrscheinlich nicht
- sicher nicht

Viele Leute verwenden die Begriffe 'links' und 'rechts', wenn es darum geht, unterschiedliche politische Einstellungen zu kennzeichnen. Wenn Sie an Ihre eigenen politischen Ansichten denken, wie würden Sie sich auf einer Skala von 1 (sehr links) bis 10 (sehr rechts) einordnen?

Mit den Zwischenwerten können Sie Ihre Einschätzung abstufen.

- links 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10 rechts

Welche Gruppierungen sind Ihrer Meinung nach an der Internetüberwachung beteiligt? Bitte schreiben Sie in die Textfelder die Namen von Gruppierungen, die Ihnen einfallen.

Wie sicher sind Sie, dass alle beteiligten und verantwortlichen Gruppierungen benannt sind?

- Sehr sicher,
- sicher,
- unsicher,
- sehr unsicher

Gegen wen richten sich Ihrer Meinung nach die bisherigen Proteste?

Vielen Dank, dass Sie sich für meine Umfrage Zeit genommen haben. Sobald Sie auf 'weiter' klicken, werden Sie auf eine externe Seite geleitet auf der Sie Ihre E-Mail-Adresse angeben können, um an dem Gewinnspiel teilzunehmen. Darüber hinaus die Möglichkeit über die Ergebnisse der Studie informiert zu werden.
### Annex B

#### B1 Table of Descriptive Statistics of used Variables

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B2 Frequencies of Missing Values in open text fields

These tables show how many of the 6 open ended text fields per question were left unanswered.

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</table>
B3  Graphs of Independent errors, Linearity and Homoskedasticity for dependent variable of Hypotheses 1 & 2 (Protestscale) and Hypothesis 3 (CFX)

Hypotheses 1 and 2
Hypothesis 3

B4 Table Tolerance and VIF scores of all predictors

Table B3: Tolerance and VIF scores of all predictors

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### B5  Factor Structure of used Items

#### Goodness-of-fit Test

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#### Pattern Matrix

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Extraction Method: Maximum Likelihood.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.
**KMO and Bartlett's Test**

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**B6  Table Multiple Regression Analysis of Hypothesis 3**

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Note: N=1137, F(5,1109)=143.814, $R^2=.627$, p<.000
## B7 Content Analysis of Group and Outgroup Frequencies

### Group Frequencies

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<th>Percentage</th>
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* FSB  Federal Security Service of the Russian Federation
* BSI  Bundesamt für Sicherheit in der Informationstechnik, Federal Agency for Security in Information Technology
* MI6  Military Intelligence, Section 6, British Secret Intelligence Service
* BMI  Bundesministerium des Innern, German Federal Ministry of the Interior
* HNA  Heeresnachrichtenamt, Austrian Army Intelligence Office
* SCRS  Service canadien du renseignement de sécurité, Canadian Security Intelligence Service
* INTCEN  EU Intelligence Analysis Centre
* ASIS  Australian Secret Intelligence Service

### Outgroup Frequencies

<table>
<thead>
<tr>
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<th>Frequency</th>
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