WHO IS WATCHING YOU, AND WHY?

A SOCIAL IDENTITY ANALYSIS OF SURVEILLANCE

Submitted by Aisling Therese O'Donnell to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Psychology, January 2010.

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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

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AISLING THERESE O'DONNELL

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ABSTRACT

The underlying theme that draws together all the chapters presented in this thesis is that surveillance, like any feature of our social world, is not imposed in a vacuum; and that information pertaining to the origin and purpose of surveillance is vital in determining how it will be perceived and evaluated (and how it will then impact on behaviour). The key aims of this thesis are, first, to demonstrate how a social identity approach can account for varying reactions to surveillance originating from different sources; second, to investigate how various contextual features exert their impact, resulting in the disparate perceptions of surveillance that exist in our society; and finally, to demonstrate how the imposition of surveillance can itself impact on the broader social context, including the relationship that is understood to exist between those watching and those being watched. These aims are broken down into ten research questions that are addressed in seven chapters.

Chapter 1 reviews the literature on perceptions of surveillance and that on social identity, and attempts to illustrate how they may be theoretically combined, resulting in the advancement of both fields. In Chapter 2, we present two studies which demonstrate a negative relationship between shared identity and the perception of surveillance as an invasion of privacy. This relationship was mediated by perceptions that the purpose of surveillance was to ensure safety. In Chapter 3, two studies demonstrate how level of surveillance moderates followers' responses to leaders with whom they either share identity, or not. Imposing high surveillance where identity was shared with a leader undermined perceptions of the leader as a team member and affected willingness to work for the group, reducing levels to that of leaders without a shared identity. Chapter 4 presents a study that aimed to investigate the role of social identity and surveillance in affecting both discretionary

behaviour and task performance. High surveillance led to higher productivity on a task, but this was associated with lower quality of work. Additionally, when identity was shared with the person in charge, helping this person was detrimentally affected by high, as opposed to low, surveillance; whereas no such differences were found where identity was not shared. Chapter 5 presents two studies which showed that framing surveillance as targeting the in-group led to outcomes such as increased privacy invasion, lower acceptability of surveillance, and reduced levels of trust in the implementers of surveillance, as compared to when surveillance was framed as targeting an out-group. However, a third study failed to replicate these results. In Chapter 6, we address how level of threat in the environment can affect evaluations of surveillance. Two studies showed that high levels of threat led to surveillance being seen as less privacy-invading, more necessary, and as having a safety purpose. Finally, in Chapter 7, we review and integrate our findings, discuss the limitations of the research, and consider the implications it has, both theoretically and practically. We conclude that, overall, the findings presented in this thesis support the notion that the source of surveillance and the perceived purpose for it are integral to the perception and interpretation of the surveillance.

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STATEMENT OF THE CANDIDATE'S CONTRIBUTION TO CO-AUTHORED PAPERS AND CHAPTERS

Chapters 2, 3, and 4 of this thesis were written up as papers for publication, two of which are currently in press. These papers are reproduced here largely unchanged and so a certain amount of repetition is inevitable, to ensure that arguments within chapters flow as originally intended. Some changes have been made, however; for example, links between chapters have been identified, and where American spelling was used, this has been changed to British English for consistency. As reported in more detail below, the major contribution to the papers, and all chapters of this thesis, was made by the candidate. However, please note that in order to recognise the collaborative nature of the research, the first person is used only in the plural sense (i.e., "we" rather than "T") throughout this thesis.

Studies 2.1 and 2.2

O'Donnell, A. T., Jetten, J., & Ryan, M. K. (2010). Who is watching over you? The role of shared identity in perceptions of surveillance. *European Journal of Social Psychology*, 40, 135-147.

These two studies, presented in this thesis in Chapter 2, were submitted as a paper to the *European Journal of Social Psychology* and accepted for publication in January 2009. The research was designed by the candidate in collaboration with Jolanda Jetten and Michelle Ryan. The candidate supervised the data collection which was carried out by undergraduate students. The data were analysed by the candidate, and the interpretation of results and writing of the manuscript was carried out by the candidate under the supervision of Jolanda Jetten and Michelle Ryan.

Studies 3.1 and 3.2

O'Donnell, A. T., Jetten, J., & Ryan, M. K. (in press). Watching over your own: How surveillance moderates the impact of shared identity on perceptions of leader and follower behaviour. *European Journal of Social Psychology*.

Studies 3.1 and 3.2 of this thesis, forming Chapter 3, were originally written as a paper and submitted to the *European Journal of Social Psychology*. The paper was accepted for publication in July 2009. The studies were designed by the candidate under supervision from Jolanda Jetten and Michelle Ryan. The candidate was responsible for data collection and data analysis (with supervisory advice). Finally, the candidate wrote the paper in collaboration with Jolanda Jetten and Michelle Ryan.

Study 4

O'Donnell, A. T., Ryan, M. K., & Jetten, J. (2009). The hidden costs of surveillance on performance. *Manuscript submitted for publication*.

This study, comprising the whole of Chapter 4, was written as a short report for the *Journal of Experimental Social Psychology*. The paper has received reviews and appears in the thesis in its revised (although not final) form. The study was designed by the candidate with supervisory support from Michelle Ryan and Jolanda Jetten. The candidate carried out the data collection, then analysed the data with supervisory support. The paper was written by the candidate in collaboration with Michelle Ryan and Jolanda Jetten.

These three studies have not yet been written up for publication. Each study was designed by the candidate with supervisory support from Michelle Ryan. The candidate supervised data collection by undergraduate students Megan Clinch and Sarah Farrar for Studies 5.1 and 5.2, and collected the data for Study 5.3. The data were analysed by the candidate with supervisory advice. Finally, the chapter was written by the candidate in collaboration with Michelle Ryan and Jolanda Jetten.

Studies 6.1 and 6.2

These studies have not been prepared for publication as of yet. Both studies were designed by the candidate with supervisory advice from Michelle Ryan. Data collection for Study 6.1 was carried out by an undergraduate student, Tamsin Meadows, under the supervision of the candidate, and the candidate collected the data for Study 6.2 herself. Data analysis was carried out by the candidate with support from Michelle Ryan, and the candidate wrote the chapter with supervisory input from Michelle Ryan and Jolanda Jetten.

STATEMENT OF THE SUPERVISORS' CONTRIBUTIONS TO

CO-AUTHORED PAPERS AND CHAPTERS

As outlined in the candidate's statement, the substantive work in the research

presented in this thesis was conducted by the candidate. This includes the literature

review, study design, statistical analysis, and interpretation. The supervisors

contributed to the papers and other chapters by giving advice on study design,

statistical analysis, and writing style. Also, they gave guidance on the theoretical

framing of this thesis through discussion of the contents and their arrangement in

the chapters as outlined above.

Prof. Michelle Ryan (first supervisor)

Prof. Jolanda Jetten (second supervisor)

XVII

CHAPTER 1

INTRODUCTION



The above photograph, depicting a piece of satirical street art by the mysterious Banksy, captures one of the issues at the heart of the debate about visual surveillance in the UK. This piece of artwork epitomises many people's worries or wonderings about surveillance: what is it looking at? Implied by this question, although not articulated, are a plethora of other questions: *Who* is watching me? Is it somebody I can *trust*; someone like *myself*? Are they actually watching *me* – or are they targeting somebody *else*? What is the *purpose* behind this? Are they trying to *catch me out*, or to *protect* me? Do I *need* this protection? Indeed, while much of the academic research into surveillance is concerned with its effectiveness (or lack thereof), or the fundamental truth of whether or not surveillance is a 'bad thing', as yet, we are not fully able to understand how people will answer these questions.

In this thesis, we will argue that the answer to the first question – 'who is watching me' – is important in informing our evaluations of surveillance, both because it is a vital piece of information in itself, and because it allows us to 'fill in the blanks' with regard to the other questions. If we know who is monitoring us, this information gives us insight into their motivations and whether or not they can be trusted. We can infer whether their purpose is likely to be benign, and who the surveillance is going to target. If we feel we can trust this person, then we can assume that if the surveillance is being imposed by them, we may need it. Our perception of the surveillance itself, therefore, is coloured by the simple fact of who it comes from.

On the other hand, who we are is not a fixed and static thing. Our understanding of other people, and our relationship to them, is dynamic and affected by the constantly changing social context. As a consequence, it is not enough to say that our perceptions of surveillance will be coloured by our knowledge of the source of surveillance, and contextual cues we can infer from this. We must also acknowledge that our understanding of our relationship with that source can be affected by their behaviour. That is, it is not just who a person is that reveals his or her motivations and trustworthiness, but what they do. Our impression of the source of surveillance can be affected by the fact that they use surveillance, and by the way in which the surveillance is used, leading to a new list of questions: I thought I knew and trusted this person – so why are they surveilling me? Do they not trust me after all? Is it to protect me, or does it seem too excessive to have a purely protective purpose? In this way we can see how the imposition of surveillance can affect the understanding of our relationships with others, just as much as they in turn can affect the interpretation and evaluation of surveillance.

AIMS AND SCOPE OF THIS THESIS

Despite the pervasiveness of surveillance in the developed world, and in the UK in particular, relatively few researchers consider how we actually feel about it and why. Much of the literature in the area is limited to evaluations of the effectiveness of surveillance in deterring crime or anti-social behaviour, or its degree of cost-effectiveness (Ditton & Short, 1998; Lilly, 2006). Sociologists tend to grapple with the question of what surveillance means for society and whether or not it is invasive (Gandy, 1993; Maguire, 1998; Zuboff, 1988). However, there is a dearth of research that investigates what people actually think about surveillance and what drives their reactions. As will become clear, reactions to surveillance are actually incredibly divergent – yet much of the literature would have us believe either that people are overwhelmingly in favour of surveillance, or that they are outraged about it. Thus, the extant research reaches no consensus, and it tends to ignore the variation in opinion that is so noticeable when talking to people anecdotally about surveillance.

This divergence may, at least in part, be explained by the fact that research tends to neglect factors that may help to explain variations in opinion. We argue that instead of trying to determine once and for all whether or not surveillance is 'bad' (i.e., an invasion of privacy), we should instead be asking *when* individuals might hold these negative attitudes, and equally, when they might not. We argue that the concept of privacy is socially constructed rather than absolute (see Karat, Karat, Brodie, & Feng, 2005; McAdams, 2005). Consequently, in order to understand how people react to surveillance, we need to systematically examine the factors that affect individuals' perceptions.

In terms of theoretical input, the purpose of this thesis is twofold: First, to examine how *who we are* in relation to others can affect our interpretations of surveillance; and, second, to show the way in which surveillance-related behaviour can affect how we see others and our relations to them. We propose that the social identity approach is the ideal vehicle for examining the interactive relationship between our interpretations of surveillance and our understanding of our relationships with others. This is because such a theoretical approach has a proven capacity for explaining the processes by which people understand their social worlds – including both relationships with other people and other features of the broader social context.

By applying the social identity approach to surveillance, the current thesis tackles the issue of how surveillance is understood, interpreted and evaluated. One of our key arguments is that interpretations of surveillance will be affected by knowing who implemented the surveillance, and our relationship to them – that is, surveillance coming from fellow group members should be viewed differently to that coming from outside the group. However, it should be noted that while identity affects our understanding of our social world, it is also affected itself by contextual factors. For this reason, this thesis also examines how the imposition of surveillance impacts upon our understanding of identity, of who is included, and how we are prepared to behave towards them as a consequence. The impact of identity and surveillance on one another has important practical implications as well as theoretical importance.

Indeed, by examining this interactive process in detail, this thesis offers a psychological and scientific account of how surveillance affects the individual and the group. While we recognise that there have been some attempts to uncover

factors that affect people's interpretations of surveillance, these contributions have been inconsistent and have not been informed by a unified theoretical perspective. Here, we use a social identity approach in an attempt to redress these shortcomings. Our overall objective is that this thesis should make a novel contribution by offering an account of surveillance that is scientific, theoretically driven, and practically relevant.

Chapter Outline

In this opening chapter, we will first provide an overview of the literature on surveillance, so as to demonstrate the gap in our understanding of how surveillance affects people. Next, we will review the literature from the social identity tradition, with a particular focus on how a shared identity can impact on our interpretations of our social world, and on our attitudes and behaviour. This will lead us to demonstrate how the social identity approach may be applied to surveillance. Ultimately, this holds the promise of increasing our understanding of not only surveillance, but also social identity processes more generally. We will then consider the way in which additional contextual factors, such as the perceived purpose of surveillance, can impact on our perceptions and evaluations of surveillance, and inform identity relationships further. Throughout the literature review, we will identify the research questions (RQs) to be considered in this thesis. Finally, we will outline how the chapters that follow address each of the research questions. While some questions are rather specific and are dealt with within a particular chapter, others are broader and are addressed throughout the thesis.

SURVEILLANCE

Background: Surveillance in the UK

Surveillance is increasingly being used in western societies, but in all likelihood many of us are unaware of how frequently our images are caught on tape by security cameras in shops, our photos are taken at ATM machines, or our voices are recorded during phone calls. Many different forms of surveillance exist, and indeed there is a reasonable amount of interest in surveillance carried out through biometrics (Lyon, 2008; Nieto, Johnston-Dodds, & Simmons, 2002), nanotechnology (van den Hoven & Vermaas, 2007), and 'dataveillance' such as communications monitoring (Lyon, 2001a, 2007a; Marx & Muschert, 2007). However, we should note that although the term 'surveillance' will be used extensively throughout this thesis, this will refer almost exclusively to visual surveillance. For example, whether they are set in public places or workplaces, most of the studies reported in the thesis feature closed circuit television (CCTV) surveillance, or in one case, face-to-face surveillance.

As all the research reported in this thesis was conducted in the UK, it is relevant to consider the context of the research, particularly with regard to how surveillance is used in the UK. Indeed, the setting for the research is particularly pertinent because surveillance in the UK is constantly growing (Bannister, Fyfe, & Kearns, 1998; Dixon, Levine, & McAuley, 2003; Norris, Moran, & Armstrong, 1998). We have led other western nations in terms of the introduction and increased use of CCTV surveillance (Hier, 2004; see also Taylor, 2002). Surveillance became entrenched into UK society in four stages: first it was introduced in the private sector, such as banks and shops; then into institutional areas of the public realm, such as on transportation and in schools; next it migrated into fully public town

centre areas; and finally it resulted in large systems providing blanket coverage (Norris, McCahill, & Wood, 2004). Levine (2000) reported that between 1985 and 2000, almost all towns and cities in the UK established CCTV systems.

Unsurprisingly, as a result, visual surveillance is now extremely pervasive in the UK. According to BBC News (2009), there are an estimated four million CCTV cameras in the UK, which amounts to one camera for every 14 people (Norris et al., 2004), and it is estimated that the average Briton is caught on camera 300 times per day (BBC News, 2002). CCTV is used not just in UK streets but also in universities, shopping centres, banks, stations, and public transport (Lyon, 2001a; see also Botan, 1996; Gilbey, 2009; The Guardian, 2009). Workplace surveillance is also extremely common in the UK (Blakemore, 2005); incorporating surveillance cameras, computer monitoring, and telephone tapping (Schmitz, 2005). Privacy International, an organisation concerned with surveillance and civil liberties, conducted a review of surveillance use around the world in 2007. They highlighted the UK as being one of the 'worst' countries for visual surveillance, both in terms of how prevalent it is and how much the information is misused. Furthermore, they placed the UK in the worst of seven categories relating to surveillance use, termed "endemic surveillance societies", which also included countries such as the United States and Russia (Privacy International, 2007). Thus, there is a particularly high level of surveillance that is peculiar to the UK, and it is very much entrenched in society.

Although most do not imply that the surveillance in use in the UK is part of some sinister master plan (see Surveillance Studies Network, 2006), some theorists discuss how our extensive surveillance can be seen to form an overarching system made up of an amalgamation of different parts. Thus, surveillance is not simply used by one person or organisation for one fixed purpose; rather, it functions within a

larger framework. Haggerty and Ericsson (2000) characterise this usage by saying "we are witnessing a convergence of what were once discrete surveillance systems to the point that we can now speak of an emerging 'surveillant assemblage" (p. 606). Their term, the 'surveillant assemblage', is based on the work of Deleuze and Guattari (1987), and is used to describe a system that may be made up of many and varied elements, but which have come together to form a system that functions entirely to surveil.

Sociological accounts of surveillance and privacy have a lot to offer in terms of ideas and concepts that help to illuminate what surveillance really means. Most notably, numerous sociologists have discussed the motivations underlying the high levels of surveillance we experience, and also the implications. As Maguire (1998) notes, many sociologists view surveillance as "a key tool of social classification, power and disciplinary control in the modern state" (p. 229). Traditionally, the metaphor of Bentham's Panopticon has been used to signify the ultimate power that is afforded by the opportunity for total and unverifiable surveillance (Botan & Vorvoreanu, 2005; Campbell & Carlson, 2002; Foucault, 1977; Wood, 2003; Zuboff, 1988). The Panopticon, much discussed by Foucault, is a circular prison design whereby the person in charge can stand in a central tower and observe all inmates, without them knowing whether or not they are being watched at any given time.

More recently the reasoning has been developed further, with the notion of the Synopticon, a metaphor for the idea of the many watching the few (rather than the few watching the many), where the media are also taken into account (e.g., Boyne, 2000). Others have advanced from the Foucauldian concept of 'discipline', towards one of 'control' – that is, the idea that surveillance systems are used to systematically control society by restricting what certain categories of people can or

cannot do (Stalder, 2002; Zuboff, 1988; Zureik, 2007). Gandy (1993) describes this phenomenon as the 'panoptic sort', which is analogous to Haggerty and Ericson's (2000) 'surveillant assemblage'. The fact that surveillance is being described in such terms illustrates the truly ubiquitous nature of surveillance in societies such as the UK.

Surveillance Effectiveness & the Financial Cost

Such ubiquitous surveillance systems involve a major investment. Between 1999 and 2003, the UK Government spent £170 million on over 600 public CCTV systems in cities, towns, and rural areas (Dixon et al., 2003). The Government are not the only ones investing in surveillance; overall, between £150 million and £300 million is spent each year on the 'surveillance industry' (Davies, 1998; Levine, 2000). Despite these costs, the UK population is reportedly very blasé about the presence of extensive surveillance (Cole, 2004). One reason for this complacency may be that the public assumes that surveillance must be effective. Indeed, it has been argued that the rapid spread of CCTV is due to it being viewed as a "silver bullet' of crime prevention" (Banister et al. 1998, p. 22). However, and increasingly, news articles appear in the popular press condemning CCTV systems for being ineffective at preventing and solving crime – because with such a high price tag, people are liable to expect results (e.g., London Evening Standard, 2007; The Independent, 2008; The Telegraph, 2003). Unsurprisingly, due to the large amounts of money spent on implementing and maintaining surveillance systems, there is a commensurate amount of research investigating its effectiveness and thus its value for money (e.g., Ditton & Short, 1998; Gill & Turbin, 1998; Groombridge, 2008; Skinns, 1998).

There are many grounds on which to evaluate the effectiveness of surveillance; Tilley (1998) lists several, which include determining whether or not surveillance has 'worked', and whether it has been cost-effective. Often such evaluations consider whether additional similar schemes could be introduced. Surveillance has been criticised for its inability to identify criminals (Davis & Valentine, 2009), for the reliability of its technology (or lack thereof), and also for its failure to deter people from committing crime in the first place (Lilly, 2006; see also Gill & Turbin, 1998; Welsh & Farrington, 2003). However, a review of these evaluations reveals that although some studies show some benefit of surveillance schemes in terms of reduced crime and increased detection (e.g., Ditton & Short, 1998), the picture is far from clear (Surette, 2005). Because, as identified above, there are various dimensions on which surveillance systems can be evaluated, it is not always clear whether or not such systems are a success. Moreover, with such large amounts of money being spent to implement and maintain CCTV systems, it is not easy to ascertain whether the schemes have been good value for money (Groombridge, 2008; Mair, 2006).

Perhaps even more importantly, though, in focusing only on whether or not surveillance systems are effective, such research is unable to provide a comprehensive account of how surveillance actually affects people. While such research is primarily concerned with the *intended* outcomes, the use of surveillance also has a number of *unintended* consequences that are neglected in such analyses.

Unintended Effects of Surveillance:

The Impact upon Privacy

It is important not just to consider the intended effects of surveillance, such as how much it affects crime figures, but also how people feel about it and react to it. This is because there are a range of unintended effects that surveillance can have, many of them concerning people's perceptions of privacy infringement, and such an impact can affect the degree to which people support surveillance and their reactions when it is imposed.

The literature on surveillance and privacy reveals an interesting divergence in attitudes that is also supported anecdotally. For some researchers, the presence of surveillance inevitably results in the infringement of privacy (e.g., Allen, Walker, Coopman, & Hart, 2007; Boyle & Haggerty, 2009), whereas others refute the idea that people should have any privacy in public places or workplaces (Whitty, 2004). We will now consider the evidence to suggest that surveillance is seen as invasive, followed by evidence that it is strongly accepted, before attempting to reconcile the two viewpoints.

Surveillance as Privacy Invasion

Surveillance can be understood to invade privacy because it involves monitoring and often recording people's movements, which many may consider unexpected, unwelcome, and intrusive. Indeed, the notion of surveillance as an invasion of privacy is extensively recognised in the literature. Both Zureik (2007) and Marx and Muschert (2007) identify the field of surveillance and privacy as one that attracts huge amounts of research interest, exemplified by many recent publications, new dedicated journals such as *Surveillance and Society*, and various edited books (e.g., Hier & Greenberg, 2007; Lyon, 2001b, 2003).

It has been suggested that individuals have a moral right to privacy (van den Hoven & Vermaas, 2007) and it is sometimes implied that surveillance is an automatic breach of this right (e.g., Stalder, 2002). Some of the literature in this area makes an automatic link between surveillance and privacy invasion (e.g., Friedman et al., 2006; Nieto et al., 2002; Surveillance Studies Network, 2006). In line with this, Torpey (2007) asserts that the very term 'surveillance' implies "a violation of our autonomy, our freedom to move about and to do as we wish" (p. 116; see also Surette, 2005). In a similar vein, White and Zimbardo (1980) believe that surveillance results in increased individuation, leading to a lack of freedom of expression, which can be considered an invasion of privacy. Sociological accounts describe the way surveillance infringes upon, and even oppresses, members of society, by keeping track of people, ordering them, and limiting what they are, and are not, allowed to do (Lyon, 2001a, 2007b). In this sense, such researchers conceive of surveillance as the ultimate invasion of privacy, because it is seen to encroach upon the way people live their lives. It thus appears that theoretical accounts make strong links between surveillance and privacy invasion. The question that arises is whether people themselves see surveillance as an unacceptable infringement on their privacy.

Evidence suggests that this is indeed the case. For example, recent developments in the regulation of workplace surveillance have been supported by trade unions, which see workplace surveillance as problematic for employees' privacy (Charlesworth, 2003). Furthermore, a report from the Information Commissioner of the UK setting out a code of practice for the use of CCTV surveillance in the UK acknowledges that such systems cover areas where people have an expectation of privacy, and therefore suggests that privacy infringement

may be a consequence of surveillance (France, 2000; Ross, 2007). In line with these reservations, UK residents in Brighton staged a demonstration against the intrusiveness of CCTV cameras by covering the cameras or decorating them in a ridiculous fashion (Davies, 1998). Similarly, in a qualitative study of caseworkers from a social services organisation, Stanton and Stam (2003) found that participants disliked carrying mobile phones intended to make them available to management. Even though the phone did not make them actually visible, it did make them constantly accountable. Consequently, they considered it a form of surveillance and found it intrusive. Lee and Brand (2005) note that even the capacity for face-to-face peer surveillance afforded by open-plan offices can be interpreted as an invasion of privacy.

There is also empirical evidence that surveillance leads to privacy invasion. For example, Zweig and Webster (2002) sampled participants from an organisation using "awareness monitoring software", where real-time images of employees are broadcast to colleagues at another location to indicate their availability. The idea underlying this software is to facilitate communication between colleagues in different locations. However, the authors note that this kind of surveillance may be even more distasteful to individuals than other forms of visual monitoring. Results showed that participants were generally very displeased with the surveillance system. Overall they felt that privacy infringement was very high and fairness very low.

Botan (1996) also found evidence for surveillance leading to perceptions of privacy invasion. The study was a survey carried out with telephone operators and other communication industry workers. On average, participants felt they were under a high level of surveillance, and the reported level of surveillance directly predicted greater levels of perceived privacy infringement.

In addition to surveillance leading to high levels of perceived privacy infringement, such perceptions can in turn impact upon attitudes towards those imposing surveillance. For example, Botan and Vorvoreanu (2005) asked participants an open-ended question about their thoughts on surveillance at work, and a large number of respondents indicated that it was an invasion of their privacy, and implied that they were not trusted by their employers (see also Falk & Kosfeld, 2006). This suggests that surveillance may lead not only to negative views of surveillance, but also of those who implement it.

Finally, the view of surveillance as infringing on privacy can have negative effects on behaviour. In addition to the findings reported above, Botan (1996) also found that high levels of surveillance led to reduced communication within the workplace, and lower work-related self-esteem. Reduced communication between group members is a negative behavioural outcome of surveillance and could be related to the perceived privacy invasion that has been experienced, and the fact that mutual trust has been eroded.

Acceptance of Surveillance

From the arguments and evidence presented above, one would be forgiven for assuming that surveillance is extremely unpopular in UK society. However, some have claimed that the notion of surveillance as an infringement upon privacy and civil liberties is not particularly acknowledged in the literature (Gallagher, 2004; see also Groombridge, 2002; Rose, 2000). Given that which we presented in the previous section, this does not seem to be the case. In any case, though, in addition to the findings which suggest people dislike surveillance, there is also much evidence to suggest that sometimes people do not consider it invasive, or at the very least, are prepared to accept it.

For example, according to Davies (1998), CCTV enjoyed strong public support in the 1990s as people were so preoccupied with the potentially useful aspects of surveillance that they did not consider any of its potential disadvantages. Indeed, Davies notes that during this time, any rare dissenting voices were likely to be silenced by the insinuation that they were in support of those targeted by CCTV; that is, criminals. Furthermore, Simmons (2007) denies the idea that surveillance technology is problematic in terms of privacy, instead claiming that such advances have increased our privacy by allowing monitoring to be more carefully targeted at certain people and not others.

This theorising is in contrast to the review presented above, and thus demonstrates the need to consider evidence for the acceptance of surveillance. In this section, we review research which suggests people can be more accepting of surveillance, or at least, not see it as invasive.

Various survey studies have reported relatively high public acceptance of CCTV schemes. For example, in a survey of residents of four UK cities, Honess and Charman (1992) found that the vast majority of respondents (around 90%) were not concerned about CCTV. In a similar survey conducted around 10 years later, Dixon and colleagues (2003) reported that two thirds of respondents agreed that the more CCTV cameras we have, the better. Furthermore, a study by Friedman, Kahn, Hagman, Severson, and Gill (2006) found that 78% of participants felt their privacy was not invaded by the presence of a CCTV camera placed on their university campus and broadcasting into nearby offices.

As we get more and more accustomed to the use of visual surveillance, we have become more and more accepting of it (e.g., Gilbey, 2009). Campbell and Carlson suggest that some individuals are now so used to being monitored that

there has been "a reconceptualisation of privacy in the consumer's mind from a right or a civil liberty to a commodity that can be exchanged for perceived benefits" (p. 588). In line with this reasoning, Nieto and colleagues (2002) describe a Supreme Court case, Katz vs. United States, in which it was ruled that whether or not surveillance was invasive could be determined by a "reasonable expectation of privacy test" (see also Steeves & Piñero, 2008; The Technology and Privacy Advisory Committee, 2004). This simply refers to comparing a person's expectation of privacy in a particular public place with what is deemed by society to be "reasonable". According to Nieto and colleagues, in the majority of cases involving visual open-street surveillance, it is judged that people's privacy has not been infringed, based on what is generally considered to be "acceptable".

All of this suggests a relatively accepting view of surveillance in modern western society. However in combination with the literature reviewed in the previous section, this leaves us with a rather confusing divergence in the literature: if, on the one hand, the loss of privacy is an acceptable price to pay for security, then why do people still sometimes report being invaded by surveillance? Reconciling the Discrepancy: When & Why is Surveillance Invasive?

Surveillance therefore presents us with something of a paradox: some welcome it as a useful tool for protection, while others view it with suspicion, or perhaps as a necessary evil (Sewell & Barker, 2001). Public surveys seem to show high levels of support for CCTV, but theoretical accounts (backed up by empirical evidence) assure us that our privacy is being infringed and that we are being controlled by surveillance systems. However, a closer look at the evidence reveals a degree of variation in opinion. For example, a more detailed examination of the very surveys that report such positive reactions to surveillance also reveal some seeds of

discontent. In the Honess and Charman (1992) report, a significant proportion of people (36%) thought CCTV infringed upon their privacy. More tellingly, 72% felt that CCTV could be "used and abused by the wrong people" (p. 9). Dixon and colleagues' (2003) later survey showed that while concerns had reduced since Honess and Charman conducted their research, 21% of people still agreed that surveillance led to privacy infringement. Haggerty and Gazso (2005a) note that social surveys of this kind may in any case be skewed towards those who are supportive of surveillance, because those concerned with control over personal information will be less likely to volunteer their personal views on such matters. This is difficult to substantiate, but nonetheless the fact remains that the divergence in opinions about surveillance needs to be addressed.

In order to reconcile these disparate accounts of whether surveillance is viewed as privacy infringement, or not, it is necessary to consider the reasons that would lead to surveillance being seen in this way. It has been demonstrated that people's understandings of privacy and those factors which may affect it may vary widely, and as such privacy can be seen as being subjective and socially constructed (Kang, 1998; Karat, Karat, Brodie, & Feng, 2005; McAdams, 2005; The Technology and Privacy Advisory Committee, 2004; but cf. Miller & Weckert, 2000). We argue it is features of the social environment that determine whether we can expect privacy in a given setting, and thus whether or not it has been invaded. Indeed, as identified by Harper (2008), while some are labelled as paranoid for holding privacy concerns about surveillance, this label only works if one assumes that the concerns are unwarranted. In addition, we suggest such an appraisal is either personally or contextually determined, rather than being an absolute and objective fact.

The process by which we arrive at our evaluations of surveillance is almost certainly complex, involving a number of different factors (Friedman et al., 2006; Gellman, 2002; Marx, 2001; Steeves & Piñero, 2008). Supporters of surveillance often emphasise the beneficial results (such as increased productivity or safety) whereas those with privacy concerns tend to express discontent with the process (Schmitz, 2005; see also Taylor, 2002). We would suggest that when it comes to surveillance, the end sometimes justifies the means. However, we also predict that if the process itself is viewed in a positive light, the surveillance will be too.

Previous research has suggested that the perceived effectiveness of surveillance impacts upon how it is viewed. However, we argue that in terms of factors affecting views of surveillance, it is even more important to consider group membership and identification. If we know who the source of surveillance is, and our relationship to them, then from this information we can infer all sorts of other things, such as what the purpose of the surveillance might be and whether or not it will be effective in benefiting us rather than targeting us. Group membership and identification are maybe the most important factors. However, this also brings us to another underlying factor, which is the perceived purpose behind surveillance and how this affects perceptions of privacy infringement caused by surveillance. It may well be the case that the actual purpose of surveillance is irrelevant; but unless we know what people think the purpose is, it is unlikely we will be able to predict their reaction to surveillance. Thus, if the purpose of surveillance appears to be reasonable and transparent, people are more likely to support or at least endure it. On a related note, we suggest that if surveillance seems to be effective at protecting us, it will be viewed more positively.

We have already documented a certain amount of research about the factors which cause surveillance to be perceived as privacy infringement, and we will now consider in turn the extant evidence for the importance of effectiveness, the identities of those watching and being watched, and purpose.

Effectiveness. As noted above, one factor that has been posited to affect reactions to surveillance is the effectiveness of the surveillance, such that people are more likely to be accepting of surveillance that is effective at protecting them or their interests. In line with this, Slobogin (2007) argues that the fourth amendment to the US constitution, which guards against unreasonable searches and seizures, should be altered to include the notion that the invasiveness of surveillance should be justified by its degree of effectiveness. This argument has been critiqued by Kerr (2009), who asserts that there is no point comparing the perceived effectiveness of surveillance with its perceived invasiveness, because our impressions of both are likely to be inaccurate. However, we argue that even though people's impressions may indeed be subjective, it is still important to take such things into account because it is these perceptions, rather than some objective reality, that are the most important factor in determining how surveillance is ultimately interpreted.

Sanquist, Mahy, and Morris (2008) found experimental evidence for this notion. They investigated reactions to various types of homeland security and found that surveillance measures were considered less invasive and more acceptable to the extent that they seemed more effective. It is important here to consider what exactly is meant by "effectiveness". The authors stipulate that the variable is composed of a number of factors, including perceptions of "personal benefit" and "enhanced national security" (Sanquist et al., 2008, p. 1131). Thus, it may be the case that participants felt surveillance was less invasive to the extent that it benefited them

and their national group, but further research would be required to disentangle the importance of effectiveness from the importance of whether surveillance benefits the group. This brings us to the second factor that we feel has emerged as important in determining how people view surveillance: the group memberships of those watching and being watched, and group identification.

Identity and group membership. Research carried out by Oz, Glass, and Behling (1999) examined the importance of group membership in determining appraisals of surveillance. Oz and colleagues found that non-supervisors were significantly more likely than supervisors to feel that workplace surveillance was an invasion of their privacy, and that it was likely to cause friction between the two groups. However, the study did not demonstrate why the supervisors were more supportive of the surveillance. It could be that supervisors were more supportive because, due to their role, the surveillance was not intended to monitor them personally; or it could be simply due to their being more committed and connected to their organisations. Both are plausible explanations but have different implications. Thus, although the study from Oz and colleagues is an advance on previous research which did not investigate factors affecting the perception of surveillance, it stops short of demonstrating the process by which evaluations are made. However, Spitzmüller and Stanton (2006) advanced upon this by showing that affective commitment to one's organisation (which is aligned with identification) is associated with greater acceptance of surveillance. Obviously commitment is not the same thing as group membership, but it relates to how people think about their groups, and is a closely linked concept.

On a related note, Alder (2001) makes a theoretical case for the differential impact of factors affecting impressions of surveillance in different *kinds* of groups.

Again, Alder does not consider the effects of group membership, per se, but in fact speaks about surveillance in groups with either supportive or bureaucratic cultures. He describes a supportive culture as one that is mutually supportive and trusting, with a shared understanding of what the group means; whereas a bureaucratic culture is said to deemphasise all of these factors. Alder proposes that surveillance will be seen as more fitting in bureaucratic cultures than in supportive ones; although surveillance should be seen as more appropriate in supportive cultures if participants have some input into its use. Thus, Alder's work supports the idea that groups are important to how we see surveillance, particularly with regard to group norms and what we expect from other group members. In this sense, the implications of this study bring us to our final factor influencing views of surveillance: purpose. This is because we will argue that the implied purpose of surveillance underlies the effects of group membership, and that both are vital in determining how we will react to it.

Purpose. Indeed, perceived purpose is one of the major themes to have previously emerged in the surveillance literature (e.g., Marx, 2001). There is already evidence to suggest that the perceived purpose of surveillance impacts upon evaluations of it. For example, Ullmann-Margalit (2008) described an extensive email exchange between colleagues following the installation of a surveillance camera in a shared kitchen space. Ullmann-Margalit noted that those who felt that only specific 'bad' or undesirable behaviours were being monitored had no problem with the camera, whereas those that had concerns about what the real purpose of the camera was felt uncomfortable about being watched. A qualitative study by Stanton and Weiss (2000) obtained complementary findings. They endeavoured to explore reactions to workplace surveillance to discover factors influencing

employees' analysis of whether or not surveillance incurred a negative experience.

Being exploratory in nature, this study did not present an extensive examination of causal factors influencing employee reactions to surveillance. However, the researchers did note that reactions to surveillance tended to be related to the anticipated use of the information. Those who expected the organisation to 'spy' on employees were inclined to view surveillance as more invasive.

In support of this, there has been additional research that systematically examined the effect of purpose on evaluations of surveillance. In an attempt to investigate the process by which surveillance comes to be appraised as invasive or not, Alge (2001) carried out a workplace study which showed that surveillance was seen as less invasive when it monitored work-relevant behaviour, and when participants were given an input into the process. Similarly, Diney, Hart, and Mullen (2008) investigated views of government surveillance and found that concerns about privacy were negatively related to perceived need for surveillance, and positively related to concerns about government intrusion.

Complementary evidence suggests that if the surveillance is relevant to the job, or to the protection of employees or clients, then the potential invasiveness of surveillance may be outweighed by the fact that it is relevant and beneficial. Persson and Hansson (2003) argue that the invasion of privacy caused by workplace surveillance may be condoned if the surveillance benefits the employer's interest, the employee's interest, or the interest of some third party, such as customers or coworkers. Based on the findings of this research, we suggest that when surveillance seems to have a legitimate and transparent purpose, it will be interpreted as less invasive. The question that remains unanswered, however, is what causes surveillance to be appraised as legitimate and transparent.

The context in which surveillance is imposed can affect how it is perceived, because different contexts are associated with different levels of need for surveillance. This, therefore, has implications for the perceived purpose of the surveillance. For example, individuals may interpret the purpose of surveillance to be more sinister if it is imposed in a setting where it seems unnecessary or inappropriate, rather than a setting where it seems to be really needed. Sætnan, Lomell, and Wiecek (2004) reported a large-scale survey of surveillance in various different public places, which found that there was around 90% support for cameras in privately-owned open spaces (such as banks), but only around 60% support for cameras on the street, and 20% for 'private' public spaces, such as sports-centre changing rooms. We assert that this distinction is not merely about the differing levels of privacy that are expected in these different public places, but also the purpose for surveillance that is inferred in each instance. In a bank, surveillance is clearly being used for security, but in a changing room it is far from clear why surveillance would need to be used or how its presence could be justified in terms of benefits to users. Therefore, we take this research as further evidence that perceptions about why surveillance is being used can affect its interpretation, and that this can be informed by the context.

Similarly, we argue that different *methods* of surveillance are likely to differ in terms of their perceived purpose, which in turn could drive differences in attitudes towards the surveillance. In support of this, McNall and Roch (2007) investigated differences in the perceived invasiveness of different types of surveillance, such as visual (video) surveillance, face-to-face surveillance, and computer monitoring. They found that face-to-face surveillance is actually interpreted as less invasive than electronic monitoring. This stands to reason, because it is at least visible surveillance

and seems more personal than covertly checking up on what people are doing. Moreover, the authors proposed that perceptions of privacy infringement mediated the direct effect of type of surveillance on measures of perceived justice (although they could not demonstrate this statistically). We would suggest it is possible that instead, the apparent level of justice or legitimacy in the situation would influence perceptions of invasiveness.

Surveillance: A Summary

In summation, despite a large body of literature focused upon surveillance, and particularly a vast amount of research and theory pertaining to surveillance and privacy invasion, the issue of how surveillance is interpreted and evaluated by the individual is far from clear. Much of the survey research suggests that people are highly supportive of the use of visual surveillance, but theoretical research from sociology and empirical evidence from related disciplines suggests we feel constantly controlled and infringed by surveillance.

The problem with much of this research is that it either assumes surveillance is seen as completely benign, or that it is an inevitable invasion of privacy – that is, it is either 'good' or 'bad' (Allen et al., 2007; Sewell & Barker, 2006). Such a rigid dichotomy does not allow for the possibility that views on surveillance and privacy differ across individuals, groups, and situations. Moreover, it means that this research tends not to investigate factors that may systematically affect our interpretation of and reaction to surveillance – leaving such accounts ever unable to account for these differing views on surveillance.

In order to understand how people can have such different reactions, it is necessary to have some knowledge of what drives their attitudes. Marx and Muschert (2007) highlight the importance of knowing who or what surveillance is

targeting, and for what purpose. While their analysis, and that of other sociologists, is concerned with understanding what surveillance means for society as a whole, we propose that surveillance also has implications for individual psychology. In particular, perceptions of privacy and attitudes towards surveillance impact upon actual behaviour, such as communication and productivity. Therefore, in the current research, we present a social psychological analysis of surveillance, whereby we are concerned with how people feel about being under surveillance, either personally or as part of a social group. Based on the reasoning and literature that we have presented thus far, the following research question follows logically:

Research Question 1: What does surveillance mean for individuals, either on their own, or as members of social groups?

Our desire to provide a psychological analysis of surveillance also leads directly to our second research question. In this programme of research, we seek to *systematically* investigate how people perceive surveillance, and *why* they perceive it in a particular way. A relatively small amount of previous research, detailed above, identifies the factors that affect how people interpret and react to surveillance. For example, some of the factors identified include the potential importance of shared group membership (Oz et al., 1999); effectiveness of surveillance (Sanquist et al., 2008); and the perceived purpose of surveillance (e.g., Alge, 2001; Stanton & Weiss, 2000). However, this body of research is disjointed and lacks a common theoretical perspective. In the studies presented in this thesis, we attempt to advance upon this previous work by systematically investigating these factors and also how they are related – that is, the process by which they inform our views of surveillance. We endeavour to demonstrate that it is possible, by applying the social identity

perspective, to show how several inter-related factors can affect how people see surveillance.

Research Question 2: What factors inform our interpretations of, and reactions to, surveillance?

These first two research questions are rather broad, and as such form the overarching framing for the thesis. In the remainder of this chapter, we will outline how a social identity approach to surveillance can reconcile not only these loosely related ideas about social context, group membership, and the purpose of surveillance, but also the bifurcated views of surveillance that pervade the literature in general. In doing so we will outline a further eight, more specific, research questions.

IDENTITY

In this thesis, we aim to make a novel contribution to the literature by applying a social identity approach to the issue of surveillance. Indeed there is, as yet, no conclusive evidence that shared identity affects how surveillance is perceived. However, it has been noted elsewhere that the social identity approach is well-placed to offer a helpful and illuminating account of reactions to surveillance (e.g., Levine, 2000). Levine suggests that classic social identity theorising can explain at least one factor that influences our reactions to surveillance. His reasoning is based upon much previous social identity theorising and research, demonstrating the importance of group memberships in informing our attitudes and behaviours. We choose this approach for its ability to explain the nuances in opinions relating to surveillance, rather than skimming over them; because this allows us to explain how

people really experience surveillance in context, as individuals within groups. For now, though, we will proceed by outlining the aspects of the social identity approach which are most relevant to the current research, before fully addressing its application to the issue of surveillance.

The Social Identity Approach

The social identity approach comprises *social identity theory* (SIT; Tajfel & Turner, 1979, 1986) and *self-categorisation theory* (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Collectively, these theories aim to explain how our group memberships, how we define ourselves as group members and the degree to which we identify, shape our attitudes and behaviours. The approach grew out of a degree of dissatisfaction with early accounts of how groups affect individuals (e.g., Le Bon, 1896), and was developed as a contrast from overly individualistic accounts of how individuals and groups relate to one another (e.g., Allport, 1924, 1962; Lott & Lott, 1965), which continue to be popular today (Pfeffer & Fong, 2005).

Social Identity Theory

Social identity theory arose as a theory of inter-group conflict. As such, it seeks to explain how relations between individuals may at times be defined more by the groups to which they belong than their personal characteristics. According to SIT, the self-concept can be defined as a continuum ranging from personal identity to social identity. The personal identity end of the continuum represents unique, personal characteristics that define people and distinguish them from other individuals. Conversely, the social identity end represents aspects of a person that are associated with group memberships. As any one person belongs to a multitude

of groups, there are multiple social identities, at various different levels of abstraction.

As proposed by Tajfel and Turner (1979), it is unlikely that self-definition ever occurs at either extreme end of the continuum; rather, at any one time, we may simply be closer toward one end than the other. An interaction between two people who know each other very well on a personal level, such as a pair of friends, may be seen as almost purely inter-personal; whereas an interaction between two people from opposing sports teams may be seen as almost entirely inter-group (for some classic examples, see Sherif, 1956; Tajfel, 1978). Classifying the self as a group member allows a person to comprehend his or her place in the social world. Tajfel and Turner (1979) assert that as part of an attempt to maintain a positive sense of self, individuals strive to differentiate their own group(s) from relevant out-group(s). If the comparison is unfavourable, this may result in the individual taking one of a number of strategies to positively differentiate either themselves or their group (see Turner, 1975). However, we will not go into detail about this here, as it is beyond the scope of this thesis.

Rather, what is more relevant for the present purposes is SIT's notion that individuals' interpretations, attitudes, and behaviours may, depending on the current social context, be affected or even defined by social identities associated with their group memberships. For example, to take our illustration from before, we can easily understand how a person's attitude towards his or her friend, and the behaviour they engage in with relation to that person, are likely to be affected by their knowledge of that person as an individual, and the inter-personal relationship that exists between the two of them. However, when a person has self-defined as a

member of another sports team, attitudes are likely to be defined by the nature of inter-group relations (power relations, status relations, etc.).

Self-Categorisation Theory

Although SIT illuminates how inter-group relations affect group members' attitudes and behaviour, the theory does not directly address the notion of relations *within* groups. For this reason, self-categorisation theory was developed as an extension of SIT, explicitly addressing intra-group processes and the relationship between the self and the group (i.e., self-categorisation) in particular. As such, the two theories can be seen as complementary and intertwined. Hence Turner (1987c) noted that SCT could also be referred to as "the social identity theory of the group" (p. 42). Indeed, SCT attempts to take a step back, and explain how individuals come to define themselves as group members, and to think, feel, and act as a single entity. Turner (1987b, p. 2) described the fundamental idea of SCT as follows:

"... that group behaviour is the behaviour of individuals acting on the basis of the categorisation of self and others at a social, more 'inclusive' or 'higher order' level of abstraction than that involved in the categorisation of people as distinct, individual persons."

Essentially, behaviour within groups is determined by a shared categorisation, an understanding of the meaning of that category, and a common interest in the fate of the group – categorisation of the self in this manner is the "cognitive basis of group behaviour" (Hogg & Terry, 2000, p. 123). Moreover, people can identify to differing degrees with their various social groups, and differing levels of identification can affect the extent to which we act in terms of that group identity (Doosje, Ellemers, & Spears, 1995).

Equally, though, the identity that exerts more influence than any other at any particular time is determined by the social context and the salience of relevant social categories (Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; Oakes, 1987; Voci, 2006). For example, imagine a PhD student called Jennifer. Jennifer is just starting her PhD in physics, and on her first day she meets her fellow students – all of whom are male. In the lab, Jennifer may become much more aware that she is a woman compared to when she is in other contexts, and as such, this identity might have more influence on her interpretations and behaviour than at other times (e.g., Ryan & David, 2003). Now imagine that a few weeks into Jennifer's PhD, she and her fellow students have a problem with library resources, because staff have recommended various important books to undergraduates without ensuring there are enough copies. This means that there are not enough books left for the PhD students, so Jennifer and the others complain to the department staff. In this case, Jennifer would see herself as much more interchangeable with her fellow PhD students, because of the salience of their shared category membership, and the fact that it is apparent they are working towards the same goal. Thus, despite the fact that her fellow group members are all still male, Jennifer is much less likely to define herself as a woman, because her gender is not relevant to the situation at hand. In addition, comparisons with staff (who have failed to order enough books) or with undergraduate students (who have taken out all the books) become more relevant. Consequently, Jennifer is motivated to act on behalf of her group (PhD students) to ensure a positive result for the group.

Thus, what we take from SCT is the importance of context in causing people to perceive themselves as group members and therefore as interchangeable with fellow in-group members. Furthermore, we would like to highlight the importance

of identification in influencing our understanding of the social world and our behaviour, and the fact that context is vital here too.

Social Identity and Social Influence

Social influence is an important concept in this thesis, because we are seeking to explain how various factors in our social world, be they other people or aspects of the broader context, affect our interpretation of and reaction to surveillance. A traditional view of social influence, which grew out of an individualistic interpretation of 'group' behaviour, is that it involves conformity to the mean of the individual group members' opinions (Allport, 1924). However, at the time when SIT and SCT were being developed, the more dominant, dual-process theory of social influence was that influence could have either a normative or an informational basis (Deutsch & Gerard, 1955). Deutsch and Gerard defined normative influence as "an influence to conform with the positive expectations of another" (p. 629). That is, it was seen as involving no genuine conversion of opinion, merely as behaviour that is in line with what others expect or what others are doing (this can also be seen as related to Le Bon's view that group behaviour is unrelated to meaningful intentions or thoughts). Informational influence, however, was defined as "influence to accept information obtained from another as evidence about reality" (Deutsch & Gerard, 1955, p. 629). This type of influence was said to involve the internalisation of information that was judged to be valid and reliable.

The social identity approach offers an alternative explanation for social influence, based particularly on the reasoning of SCT, which proposed a single process of conforming to relevant, self-defining in-group norms. This process is termed *referent informational influence* (RII; Turner, Wetherell, & Hogg, 1989). The core

idea is that when a given group membership becomes salient, individuals categorise themselves at a level inclusive of other group members, and hence their behaviour will be in line with the norms of that group. In conditions of uncertainty, fellow ingroup members are seen as a valid source of information for the group norm, and for appropriate behaviour in general. Thus, influence can neither be defined as entirely normative nor entirely informational – for it is a combination of the two. As an example, take Sherif's (1936) autokinetic paradigm. Here, individuals were asked to judge the distance travelled by a light in a darkened room, and their estimates seemed to converge towards a group mean. However, as noted by Turner (1985), although there was no correct answer in this case (as the light was not moving) participants were not aware of this fact. We can therefore interpret the findings as indicating that participants converged towards an emerging group norm because they found the task difficult and sought input from fellow group members, an apparently valid source of information. In line with this reasoning, Abrams and colleagues (1990) report empirical evidence to support the notion that individuals do not internalise or reproduce normative information which comes from those categorised as out-group members.

The central prediction of RII, that shared identification with a group is a precondition of mutual intra-group influence (Turner et al., 1989), is key to the current research. Correspondingly, behaviour that is not consistent with the group identity or with what is best for the group is unlikely to be seen as prototypical or normative for the group, and is therefore unlikely to be influential (Turner, 1987a, 1991). In this thesis we will argue that surveillance is most likely to be accepted when it is in line with group norms (see Alder, 2001; but see Stahelski & Paynton, 1995, for an alternative account). Before examining this in more detail, however, it is

pertinent to provide some empirical evidence for this theoretical account of how social identity allows others to influence how we see the world and interact with it.

Empirical Evidence: Influence Based on Social Identity

During the 20 or so years since the social identity account of social influence was first posited, many studies have provided empirical evidence for the idea that shared social identity underlies the potential for social influence. Social influence can produce changes in individuals' appraisals, attitudes, and behaviours.

For instance, Platow and colleagues (2005) provided evidence for identitybased influence on measures of both personal attitudes and behavioural outcomes. Participants listened to a comedy routine which either did or did not include 'canned laughter'. Furthermore, the tapes were labelled to indicate that the audience were either members of the participants' university (i.e., in-group) or members of an outgroup. Platow and colleagues demonstrated that participants laughed more times, and for a longer amount of time, when they heard in-group laughter on the tape. What is more, they also privately rated the routine as more amusing, suggesting that the impression of the material as humorous had been internalised. This demonstrates that rather than adhering to in-group norms merely to please fellow group members, we also adhere to group norms because we interpret them as valid and meaningful information about the world. Further evidence from Platow and colleagues (2007) demonstrated that participants experienced lower levels of physiological arousal associated with pain when they had been reassured by an ingroup member, rather than receiving no reassurance, or that of an out-group member. Again, this suggests that group membership leads to social influence which has a powerful effect on our interpretation of the world.

Additional support for identity-based social influence has been obtained in research showing that participants gravitated towards fellow in-group members or an in-group norm, on moral beliefs (Halloran, 2007), attitudes (Postmes, Spears, Lee, & Novak, 2005), political opinions (Moral-Toranzo, Canto-Ortiz, & Gómez-Jacinto, 2007), choice dilemmas (Postmes, Spears, Sakhel, & de Groot, 2001; Sassenberg & Boos, 2003), and responses to a word task (Kalkhoff & Barnum, 2000). Furthermore, this influence extends to behavioural intentions, which have been shown to be affected by relevant in-group norms (Bagozzi & Lee, 2002) and persuasion attempts from in-group members (Falomir & Invernizzi, 1999).

Particularly relevant to the current research is previous work that has shown social identity can influence how acceptable we consider other people's behaviour to be. Hornsey and colleagues have amassed compelling evidence for the importance of group membership and identification in reactions to criticism of the in-group. For example, Hornsey and Imani (2004) found that criticism of the in-group was responded to in a less defensive manner if it came from within the in-group than if the same criticism was voiced by an out-group member. This was mediated by the perception that criticism from in-group members was perceived as more constructive than similar criticisms voiced by an out-group member (see also Hornsey, Oppes, & Svensson, 2002). Hornsey, Trembath, and Gunthorpe (2004) extended this evidence by showing that in-group members' criticism was only received more positively to the extent that they appeared invested in the in-group – that is, they seemed to care about the fate of the group. In complement to these findings, Hornsey and colleagues (2005) showed that criticism of the in-group that was voiced to the out-group was viewed more negatively than if an in-group audience had been chosen; and this was particularly the case for high identifiers (see

also Ariyanto, Hornsey, & Gallois, 2006). As above, the implication of these studies is that criticism voiced to the in-group is probably meant constructively whereas criticism voiced to the out-group is appraised as more malicious.

Social Identity and Surveillance

In line with the above findings, we argue that the same behaviour displayed by an in-group or an out-group member can be interpreted very differently.

Ambiguous behaviour, such as criticism, is evaluated in light of what we know about the source: do they care about the group and its members, and want to engender the group's progress and improvement, or are they outsiders who simply seek to undermine the group? We argue that surveillance, like group-directed criticism, can be appraised as either beneficial or detrimental.

Given that previous research demonstrates that social identity can influence the way in which we interpret the world around us, it is reasonable to suggest that social identity should impact on the way in which we interpret surveillance and react to it. In fact, it has already been proposed that it is important to know the identity of the implementer of surveillance, and one's relationship to them. Levine (2000) notes that while most accounts of surveillance assume differences in behaviour arise from being under surveillance or not, few give any consideration to the impact of *who* is responsible for the surveillance.

Levine approaches this issue from the perspective of the *social identity model of deindividuation effects* (SIDE; Reicher, Spears, & Postmes, 1995), which is concerned with the way in which being visible versus being anonymous contributes to social identity processes and deindividuation effects (e.g., Lea, Spears, & de Groot, 2001; Postmes et al., 2001; Robertson, 2006; Smith, Terry, & Hogg, 2007; Spears & Lea, 1994; Spears, Postmes, Lea, & Wolbert, 2002). Whereas traditional accounts of

deindividuation assert that the anonymity associated with being in a group causes individuals to lose themselves in the group, and to cease being constrained by normal social norms and expectations (e.g., Haney, Banks, & Zimbardo, 1973; Prentice-Dunn & Rogers, 1982), the SIDE perspective offers an alternative view. SIDE suggests that in situations where individuals have self-categorised at the group level, their behaviour is defined more in terms of that social identity rather than a personal identity. Thus, deindividuation does not result in a loss of self, but merely a shift from one level of self-definition to another. According to SIDE, then, behaviour occurring within groups is not meaningless and unconstrained by social norms, but is in fact entirely socially determined.

In support of the SIDE model, studies have provided evidence that being visible to the in-group results in rather different behaviour than does visibility to the out-group (Douglas & McGarty, 2001; Klein, Spears, & Reicher, 2007; Lea, Spears, & Watt, 2007). For example, it has been shown that the expression of attitudes that are normative to the in-group but condemned by the out-group increases when people are visible to the in-group, but decreases when they are visible to the out-group (Reicher & Levine, 1994; Reicher, Levine, & Gordijn, 1998). This demonstrates the importance of the identity of the surveillor in affecting behaviour.

However, in the present research, we are more concerned with how the identity of the implementer of surveillance affects how surveillance is interpreted, how we then react to the surveillor, and how all of this in turn affects our own attitudes and behaviour. There is already some evidence to suggest that group membership, or being part of a group with a shared identity, can impact on how surveillance is viewed (Alder, 2001; Oz et al., 1999). Based on this evidence and our reasoning outlined above, we anticipate that surveillance coming from the in-group

will be seen as less of an infringement on privacy than if it came from the outgroup, because when categorising at the group level, other group members are seen as interchangeable with the self. Thus, surveillance from such a source should not be viewed as an invasion. In line with this reasoning, our next research question is as follows:

Research Question 3: Does identifying with the source of surveillance or sharing identity with this source make surveillance seem less invasive?

However, in order to understand the relationship between surveillance and perceptions of privacy infringement, it is necessary to examine more closely the processes at play. We do not wish to offer the prediction that it is mere categorisation that causes shared identity to impact positively upon reactions to surveillance. Rather, we suggest that in addition to a direct route from shared identity to positive evaluations of surveillance, there will also be a mediating mechanism of assumed protection. Reasoning from the social identity approach tells us that part of categorising oneself as a group member involves an assumption of consensus of opinion and shared goals with other group members (Turner, 1987c; Turner et al., 1989). Thus, we argue that the knowledge of someone's group membership informs us something of what their intentions might be.

Empirical research provides evidence for this prediction by showing that we are more trusting of fellow group members than of out-group members (Jetten, Duck, Terry, & O'Brien, 2002; Tanis & Postmes, 2005). Moreover, Hornsey and colleagues have already demonstrated that the positive interpretation of ambiguous behaviour from the in-group (namely in-group criticism) was driven by an assumption that in-group critics were invested in the group and aimed to

constructively help the in-group (Hornsey & Imani, 2004; Hornsey et al., 2002; Hornsey et al., 2004). Based on the collective insights of this previous research, we therefore expect that surveillance coming from an in-group source will be evaluated more positively because there will be an expectation that it must be being used to benefit the group. Accordingly, this is our next research question:

Research Question 4: Does identity lead to more positive perceptions of surveillance because we assume surveillance from the in-group benefits the ingroup?

Can Surveillance Impact on Identity?

Following from the above research question, we turn to a different question: if social identity can impact on views of surveillance, can surveillance impact on our views of others? We propose a limit to the effect of identity on surveillance and, in fact, we suggest that in some circumstances, there will be a *reversal* of this effect. As reviewed above, research demonstrates that surveillance can have negative effects on group morale and social cohesion (Botan & Vorvoreanu, 2005; Sætnan et al., 2004), suggesting that surveillance can detrimentally impact upon a group's sense of shared identity. Based upon the social identity literature, we note that in order for identity-based influence to occur, group members should act in ways that are in line with the group identity, and in ways that appear to benefit the group (Haslam & Platow, 2001; van Knippenberg & Hogg, 2003). As outlined above, we expect that the very reason shared identity will lead to enhanced perceptions of surveillance is because people will assume surveillance coming from the in-group intends to benefit the in-group (i.e., RQ 4). After all, when we have a shared identity, we

assume that our fellow group members share our understanding of the group and its goals.

It has previously been asserted that surveillance fits more readily in relations involving coercive power (or 'power over') that is associated with out-groups, rather than identity-based power/influence (or 'power through'), which is predominantly associated with in-groups (Fink, Cai, Kaplowitz, Chung, Van Dyke, & Kim, 2003; Reynolds & Platow, 2003; Simon & Oakes, 2006; Turner, 2005). Specifically, a sense of shared social identity allows for mutual intra-group influence and this capacity for influence means that a leader has 'power through' their fellow group members. Conversely, leaders who do not share identity with their followers have no basis from which to influence their behaviour, and must instead rely upon coercive tactics such as the use of surveillance, which gives them 'power over' others (Simon & Oakes, 2006; Turner, 2005). Since no relationship is understood to exist between leader and followers in this latter case, surveillance seems to fit the circumstances. However, when identity is seen to be shared, surveillance is both unnecessary (because influence is possible) and unexpected, because in-group leaders should trust their fellow group members (Reynolds & Platow, 2003).

We predict that shared identity would lead to surveillance being viewed more positively (compared to non-shared identity; RQ 3) because it would be assumed that it was being used to benefit the in-group (RQ 4). Here, we advance upon this by suggesting that if this perception of care is undermined, then both the surveillance itself and those who have imposed it may begin to be viewed in a very different manner. Research demonstrates that group members acting against what is expected or beneficial for the group may threaten the very sense of what the group stands for (Marques, Yzerbyt, & Leyens, 1988). In order to prevent this, other group

members cease to think of them as representative members of the group (Hornsey & Jetten, 2003). We thus suggest that if we cause people to doubt that surveillance aims to benefit their group, we may destabilise the very understanding of shared identity, and all the positive effects that go with it. Thus, if the assumption of benefiting the in-group is undermined, then the positive effects of identity upon perceptions of surveillance and its implementers will also be undermined. It should be noted that we are specifically interested here in whether this negative effect of unnecessary or non-beneficial surveillance would lead to a negative view of those who impose surveillance, in particular if in-group members are responsible for the surveillance:

Research Question 5: Does surveillance that does not seem to benefit the in-group cause a backlash against in-group implementers?

Beyond Perceptions and Attitudes: Effects on Behaviour

In the current research, we aim to go beyond demonstrating the effects of identity and surveillance on perceptions and evaluations. In the knowledge that previous social identity research has shown effects on observable behaviour (Platow et al., 2005; Reicher & Levine, 1994) and that previous surveillance research has shown that surveillance can have an effect on real behaviour (Botan & Vorvoreanu, 2005), we propose that both identity and surveillance in interaction will also impact on behaviour. Indeed, there is evidence to suggest that exposing people to high surveillance leads to greater productivity on ascribed tasks (Aiello & Kolb, 1995; Stanton & Julian, 2002). We anticipate finding support for the positive effect of surveillance on productivity in our research as well. However, we are also interested in this effect in conjunction with the combined effects of surveillance and identity

upon *non*-ascribed behaviours. Such a focus would allow us to extend previous research, which so far has only examined the intended effects of surveillance (i.e., work on effectiveness; Ditton & Short, 1998), to instead *compare* the effects of surveillance on intended and unintended outcomes.

Importantly, we already know that surveillance does not have uniformly positive effects. Research into the effects of surveillance in workplaces and other task-based environments has also shown that surveillance may have detrimental effects. As noted by Oz and colleagues (1999), putting surveillance in place may communicate to individuals that certain goals are more important than others; for example, that productivity is more important than work quality (see also Piturro, 1989; Stanton & Julian, 2002). In addition, surveillance may damage the organisational culture and hence have negative effects on willingness to engage in extra, discretionary behaviours. For instance, as noted in the previous section, imposing surveillance may undermine morale (Botan & Vorvoreanu, 2005) and lead to a lack of social cohesion (Sætnan et al., 2004) in a workplace or other group setting. Piturro reports that employee satisfaction increased in an organisation that eliminated workplace surveillance, suggesting that individuals were unhappy with the environment created by the surveillance. We are now interested in how these negative effects of surveillance impact on behaviour.

The proposed effect of surveillance on discretionary behaviours is particularly interesting in combination with the effects of identity. Much previous research has documented the positive effects of shared identity on group loyalty (Jetten, Branscombe, Spears, & McKimmie, 2003; Zdaniuk & Levine, 2001), organisational citizenship behaviour (van Dick, Grojean, Christ, & Wieseke, 2006; van Dick, Hirst, Grojean, & Wieseke, 2007), and general helping (e.g., Levine,

Prosser, Evans, & Reicher, 2005; Levine & Thompson, 2004). Building upon a limited amount of prior research (e.g., Niehoff & Moorman, 1993), we propose that this positive effect of shared identity on helping or citizenship type behaviours may be negatively affected by surveillance that does not seem to benefit the in-group. In other words, just as we predict that non-beneficial surveillance will negatively backlash on how implementers are perceived (RQ 5), we also expect that this negative view will reduce people's willingness to work on behalf of the group and for the surveillance implementer.

Research Question 6: Does the proposed backlash of surveillance on identity also impact on discretionary behaviours?

CONTEXTUAL FACTORS

As identified earlier, this thesis has a number of research questions, some specific and some more broad. In the most general sense, we aim to address the questions of how surveillance affects us on a personal level, as individuals and group members (as opposed to at a societal level; RQ 1), and to uncover the factors that affect how we respond to surveillance (RQ 2). That is, how do we interpret surveillance? How does our perception impact on our view of the implementers? What does this mean for our own behaviour? The over-arching aim of this thesis is to identify and explore the notion that surveillance (and our reaction to it) occurs within a given social context; hence the way we interpret the surveillance is affected by this context, and the way we interpret the context is affected by the fact that surveillance has been imposed. We assert that there is no objective answer as to whether or not surveillance is invasive; whether or not it turns us against those who

impose it; and whether or not it makes us less willing to go the extra mile. Instead, other factors in the social context provide the answers to these questions.

We have highlighted the importance of the source of surveillance (RQ 3), the intentions that are inferred from this knowledge (RQ 4), and the implications of such inferences being undermined (RQs 5 & 6). In the final section of this chapter, and of the thesis, we will consider the importance of the wider social context and how this affects our relationship to those who impose surveillance. In line with previous research, and also complementing our earlier predictions, we will examine the importance of the target and purpose of surveillance, and the level of threat apparent in the broader social context, in determining our reactions to surveillance and surveillors.

The Target and Purpose of Surveillance

Thus far, we have predicted that shared identity will lead to more positive views of surveillance – but only when its purpose seems to benefit the in-group. That is, we anticipate that the purpose of surveillance in relation to the in-group will be instrumental in determining reactions to surveillance – albeit indirectly. In this section, we will consider the *direct* effects that varying the purpose of surveillance might have upon how it is interpreted. Specifically, we consider how the purpose of surveillance can be altered by manipulating the closely related notion of who is being *targeted* by surveillance. When one knows who the target of surveillance is, the purpose is often implied, and vice versa. For example, if surveillance in a high street shop was found to target staff members operating the till, it might be assumed that the purpose was to stop them from stealing money from the till. However, if the surveillance instead targeted people standing near an expensive handbag display, it

would more likely be inferred that it was being used to prevent theft by customers. Hence, the two concepts are closely inter-related and so in the studies relating to this theorising, we manipulate the target of surveillance so as to also imply a certain purpose. There is a limited amount of extant research providing evidence about the role of either the target or purpose of surveillance in determining reactions to the surveillance. In the next section, we will consider this research and how its evidence links to the other work presented in the thesis.

Previous Evidence: Why Should Target and Purpose Matter?

The notion that reactions to surveillance might vary depending on the perceived purpose is not a new one. Indeed, earlier in this chapter, we identified that much of the previous work examining factors that affect views of surveillance is essentially about purpose (e.g., Alge, 2001; Persson & Hansson, 2003; Ullmann-Margalit, 2008). As such, we will not describe this research in too much detail here, but will draw together the main findings and their implications for our research. In addition, we will combine the findings related to purpose with the limited amount of literature on the importance of knowing who the *target* of surveillance is.

Much of the research which examines factors that affect reactions to surveillance is concerned with the purpose of surveillance. Several studies have found evidence that feelings of privacy invasion were related to concerns about the purpose of the surveillance, and particularly to the notion of the collected visual information being misused (Stanton & Weiss, 2000; Ullmann-Margalit, 2008). If surveillance is implemented as part of a transparent process whereby participants can see it has a legitimate purpose, then it is seen as less invasive (Alge, 2001; Persson & Hansson, 2003). However, not all research has yielded such straightforward results. Sætnan and colleagues (2004) found that support for

surveillance varies widely depending on the context in which it is imposed. This variation may be due to the fact that the implied purpose of surveillance varies depending on the setting, as do the potential targets. For example, surveillance placed in an office setting implies that employees are being monitored to make sure they work hard and behave as expected, whereas surveillance in an outdoor, city centre setting is likely to be interpreted as promoting safety and public order, by targeting a minority of anti-social individuals. However, such issues are beyond the scope of Sætnan and colleagues' study.

Relatively few studies examine how the target and purpose of surveillance are inferred by individuals in real-life situations, and how this impacts upon views of surveillance. However, in a theoretical paper, Cole (2004) considers the signs used to warn of the use of surveillance in public places, and the framing of target and purpose of surveillance that can be inferred based on them. The language used on such signs can vary considerably and provides information about the target and purpose of surveillance, which we argue can affect the inferences people make about the surveillance, and their perceptions of it. For example, a sign might say, "CCTV is used in this area for your safety and protection", or it might read, "You are on film! CCTV is in constant use". Taking an interest in both the intended and unintended effects of surveillance, Cole identifies three possible consequences of the signage itself: first, it can aggravate anxiety about level of crime; second, it can reinforce social divisions between those it supposedly targets and those who it protects; and finally, it contributes to the general feeling of public space, by indicating how those in power envisage the space being used.

In our own research, we are primarily concerned with the notion of divisions between the targeted and the protected (Cole's second point). Unlike Cole, however,

our concern is not the use of surveillance (and signage) to sort and stratify society. Rather, we are interested in how surveillance can be presented, or 'framed' to the public, to imply that certain groups are targeted (and others not), or that a certain purpose is served by the use of surveillance. Research has already suggested that people perceive surveillance differently depending on whether it targets them or not: Friedman and colleagues (2006) reported that male participants saw surveillance as less of an invasion of privacy when they were not personally being watched (no such effect was found for females). However, Friedman and colleagues did not fully explore the process by which target information affected how participants reacted to surveillance. In the current research, we aim to build upon this work by examining how such information is interpreted by individuals, and the process by which this impacts on their view of surveillance, and of those who imposed it.

These questions are not just of theoretical value, but also of applied value. Research shows that we have particular ideas about what sections of society are likely to be targeted by certain types of surveillance (Hernandez, 2007). For example, some people assume airport security targets people of Arab appearance due to fears about terrorism and the popular perception that this population is likely to engage in such behaviour. We aim to build upon the small amount of existing research in this area, to offer an account of the importance of the target and purpose of surveillance that is theoretically-grounded and consistent with the rest of the work in the thesis. As such, our next research question is as follows:

Research Question 7: How does information on the target and purpose of surveillance affect how surveillance and its implementers are perceived?

As with several of the other research questions, we do not view this question as having one simple answer. Indeed, we anticipate that although there should be a direct relationship between how surveillance is framed and how it is perceived, there should also be an indirect relationship. We predict that sharing identity with the source of surveillance will lead to surveillance being evaluated more positively (RQ) 3) because of the assumption of benefit to the in-group (RQ 4). As such, we also predict that if this was not the case, people will appraise surveillance more negatively and this will also impact negatively on evaluations of the implementers (RQ 5), and on people's willingness to help them (RQ 6). Earlier, we suggested that the purpose of surveillance can be inferred from knowing the identity of the source (RQ 4). Now, we extend this idea by proposing that the reverse can also be true: if we know the target or purpose of surveillance, we may be able to infer the identity of the source, or rather the likelihood of the source being someone who can be identified with. Thus, if surveillance seems to target the out-group and protect the in-group, it will be perceived as less invasive not simply because it is targeting someone else, but rather because it could be assumed it is coming from someone that can be trusted and assumed to be 'on our side' (Reynolds & Platow, 2003; Simon & Oakes, 2006). Based on this reasoning, our next research question is:

Research Question 8: Does identification with the implementers of surveillance underlie the direct effect of framing of target and purpose on perceptions of surveillance?

Threat and Surveillance

As noted in the Surveillance section of this chapter, one of the factors that has been identified as affecting reactions to surveillance is the degree to which it is

perceived to be effective (e.g., Sanquist et al., 2008; Slobogin, 2007). By 'perceived effectiveness' we mean its proven ability to protect or otherwise benefit individuals, rather than targeting them or 'spying' on them. In the final part of this chapter, we examine the related issue of level of threat. We consider that threat and perceptions of effectiveness are often closely related, at least in public settings, where the purported purpose of surveillance is to protect the safety of members of the public. These concepts are linked because they both relate to necessity. The fact that we are concerned with effectiveness shows that we want effective surveillance to protect us. If it seems that surveillance is necessary, we want to know it is in place, and are likely to feel positively about it. Thus, surveillance will be seen as necessary if there is a threat, but unnecessary if there is no threat. Indeed, it has previously been suggested that in this age of the threat of terrorism, we are more concerned with safety than privacy, and so this leads us to tolerate surveillance that we might have otherwise considered invasive and unacceptable (Levi & Wall, 2004).

This reasoning is consistent with that which has been discussed in the Identity section of this chapter. We predict that the perception that surveillance is being used to benefit the in-group is vital in explaining the effects of shared social identity upon reactions to surveillance, attitudes towards surveillors, and discretionary behaviours (RQs 4, 5 & 6); and that it will lead to greater identification with the source of surveillance (as in RQ 8). Arguably, surveillance is likely to be seen as necessary and therefore helpful if the threat is high – whereas if threat is low, it is likely we will interpret surveillance rather differently: 'This environment is not threatening, so why is it under surveillance? Why am *I* under surveillance?' We argue that the presence or absence of threat in an environment will colour the

interpretation of surveillance and the motives of surveillance. In turn, this will affect reactions to the surveillance itself and also its implementers.

Does Threat Justify Surveillance?

The extensive use of threat in the broader social context to justify the introduction or increase in use of surveillance will be discussed more fully later in the thesis (Chapter 6) and so we will not devote too much space to it here. However, it should be noted that politicians and local authorities alike have used threatening prior events, such as a child kidnapping (Coleman & Sim, 2000) and the September 11 terrorist attacks (Donohue, 2006; Haggerty & Gazso, 2005b; McAdams, 2005), to justify increased surveillance powers. The surveillance imposed in the US under the 2001 Patriot Act after the aforementioned terrorist attacks was at a very high level (Levi & Wall, 2004). While some argued that the threat was not high enough to make up for the erosion of citizens' civil liberties (Bell, 2006), others accepted the increased surveillance (as reported by CNN, 2001). People are likely to need reassurance when they feel the threat to their personal safety is high, and may therefore be willing to sacrifice some degree of personal privacy. Indeed, the very reason surveillance is imposed in many cases is to restore confidence. It may be installed to encourage people to use certain areas of a city, or transport services – spaces they might otherwise have avoided due to a perceived threat (Bassett, 2007; Chen & Noriega, 2003; Stalder, 2002).

Based on our earlier reasoning that surveillance will be viewed more positively when it is seen to benefit the group, and evidence that information about high threat has previously been used to justify surveillance, we argue that high threat will make surveillance seem more necessary, therefore leading to more positive

appraisals of surveillance and those who implement it. As such, our next research question is as follows:

Research Question 9: Do differing levels of threat affect how surveillance and its implementers are perceived and appraised?

However, as touched upon earlier, one of the aims of this research is not just to demonstrate the effect of the level of threat upon how surveillance is perceived, but also to elaborate the process by which this happens. As we note above, we believe part of the process is due to the apparent necessity for surveillance under high threat. In addition, identification with the source of surveillance is likely to underlie the effect of threat on views of surveillance. In the previous section, we introduced the notion that information about surveillance and how it is being used might impact on how we see the imposers of surveillance (RQ 8). Our point here is related but slightly different. Again, we suggest that a contextual factor (here, threat) will lead to increased identification, which would then lead to a more positive perception of surveillance. Lending extra support to our predictions is the observation that, in previous research, perceptions of threat and identification have been found to be correlated. For example, threat to the in-group (from an outgroup) has been found to increase identification (LeVine & Campbell, 1972; Stein, 1976; see also terror management theory, Greenberg, Pyszczynski, & Solomon, 1986; social identity theory, Tajfel & Turner, 1979). The 'London is not afraid' attitude, which drew together thousands of Londoners as a result of the 7th July train bombings in 2005 (BBC News, 2005) illustrates this effect. Thus, increased threat to one's personal safety, and that of other law-abiding people, posed by a more menacing out-group, can lead to increased identification with the in-group. In turn,

this can be seen as driving a more positive appraisal of surveillance. Based on this reasoning, we offer our final research question:

Research Question 10: Does increased identification with the source of surveillance underlie the effect of level of threat on perceptions of surveillance?

SUMMARY

In this opening chapter, we have attempted to outline and draw together the main bodies of literature and theoretical arguments that are central to the present research; those pertaining to surveillance, social identity, and social context. We have argued that our understanding of the way in which surveillance is perceived is limited, and that a social identity account can provide a more nuanced explanation about how people arrive at their interpretations of surveillance. We have also argued, however, that understandings of identity can also be affected by social context – and thus that it can itself be affected by the imposition of surveillance. Finally, we have argued that features of the broader social context – such as target, purpose, and threat – need to be taken into account if we are to more comprehensively understand how people arrive at their evaluations of surveillance. Responses to surveillance are not uniform because these various factors impact on how surveillance is interpreted and the intentions that are inferred. In turn, we argue that this will have an effect upon how the implementers are seen, and on the helpful, discretionary behaviours that people are willing to perform in service of those implementers.

The Present Research

In reviewing this literature and presenting our own theories of surveillance and identity and how they interact in real social contexts, this chapter has attempted to show how these fields can be combined in a way that provides insight and advancement to both bodies of literature. Throughout this chapter, our various research questions have been stated as they naturally arose in relation to the extant literature. The first two of these were broad questions, which aimed to summarise the overarching theme of the thesis. The first question asks: "What does surveillance mean for the individual?" In asking this question we do not seek to neglect the reaction of individuals as group members, for we are particularly interested in this question. Rather, we aim to focus at a level more specific and personal than that of, for example, the sociological analyses of surveillance. In this way, this thesis endeavours to provide a social psychological account of surveillance.

The second broad question deals with the factors that affect how people respond to surveillance — another area of research that has so far received limited attention in the literature. The small amount of literature which has addressed this issue has been rather disjointed and lacks a unified theoretical perspective. In investigating factors that impact on our views of surveillance, the current research aims to contribute both a strong theoretical account of the process, and also a systematic scientific demonstration of our account. These first two research questions are addressed throughout the thesis, in every chapter, whereas the remaining research questions are addressed in one or two particular chapters. Below, we outline how these questions will be addressed in the remaining chapters.

In Chapter 2, we address Research Questions 3 and 4, pertaining to the effects of identity upon perceptions of surveillance, and the importance of inferring

that surveillance from the in-group must be beneficial. We present two studies which investigate the role of social identity in appraisals of the purpose and invasiveness of surveillance. The findings show that there is indeed a role for shared identity in predicting perceived invasiveness of surveillance, and that this effect is driven by appraisals of the purpose of surveillance. These studies are important because they provide the first empirical evidence for these effects, and because they are a major advance upon accounts which neglect to account for factors affecting perceptions of surveillance.

In Chapters 3 and 4, we focus upon Research Questions 5 and 6. These questions are concerned with the notion of a potential 'backlash' of surveillance upon shared identity, and have a more organisational focus than the other chapters. Chapter 3 presents two studies that demonstrate how level of surveillance moderates followers' responses to leaders with whom they either share identity, or not. That is, perceptions of in-group leaders are damaged by the imposition of high surveillance (RQ 5). The second study also shows that this effect extends to behavioural intentions to work for the good of the group (which is related to RQ 6). In Chapter 4, we replicate this latter finding with an actual behavioural measure of helping. This chapter also highlights the conflict between monitoring productivity, and creating an environment where people are willing to go beyond what is strictly required. Each of these chapters advances theorising in both the surveillance literature and the social identity literature. In addition, they provide important practical insight, as they warn what surveillance can do to an otherwise cohesive environment.

Chapter 5 addresses Research Questions 7 and 8, which focus on the relevance of the target and purpose of surveillance in determining reactions to

surveillance and identification with surveillors. Two studies provide support for Research Question 7, showing that framing surveillance as targeting the in-group, rather than the out-group, leads to outcomes such as increased privacy invasion, lower acceptability of surveillance, and reduced levels of trust in the implementers of surveillance While a third study fails to replicate these results (potential explanations are discussed) and Research Question 8 was not supported, we still argue that the work presented in this chapter offers important insights into the role of contextual factors, social identity, and the interpretation of surveillance.

In Chapter 6, we consider the final two Research Questions: 9 and 10. Here, we address how level of threat affects the perceived appropriateness of surveillance, both directly and indirectly (through identification). The results reported in this chapter provide mixed support for our hypotheses. One study shows that threat impacts upon perceptions of surveillance as expected (in line with RQ 9). However, the second study revealed that regardless of the level of threat, high surveillance was preferred. This result was unexpected, but it sheds light upon the process affecting evaluations of surveillance, and additional factors that may influence this.

The final chapter of this thesis, Chapter 7, serves as a General Discussion. In this chapter, the findings will be summarised, integrated, and evaluated against both the previous research and our own research questions and predictions. The theoretical implications of the research for both the surveillance literature and the social identity literature will be considered, and practical implications will be discussed.

The Contribution of this Thesis

By the time the reader finishes the final chapter, the magnitude and novelty of the contribution of this thesis should hopefully be clear. We aim to provide a

scientific, social psychological analysis of how social identity impacts upon perceptions of surveillance and how in turn surveillance contributes to the social world it exists in, by affecting those very same relations within and between groups. In addition to the novelty of the research topic, there is a great deal of variety in the research presented here. For example, we addressed a range of research questions across ten studies. The hypotheses were tested in various different contexts, including workplaces, university residences, nightclubs, city centres, and laboratories. We have also endeavoured to make use of a variety of methods in the present research; hence there is survey data, experimental questionnaire data, and laboratory data reported here. Furthermore, this means that we have investigated not only attitudes and behavioural intentions, but also actual behaviour.

Despite the numerous research questions considered and methodologies utilised, this thesis has a common theme running through it; which is that in order to understand reactions to surveillance (or many other aspects of our social world), we must consider it in context. We cannot afford to neglect the factors that impact upon the way in which surveillance is interpreted, or how it in turn impacts upon the very intra- and inter-group relations it forms a part of. In this way, this thesis aims to contribute not only to the body of literature on surveillance, but also to that on social identity, in an attempt to understand how each impacts upon the other.

CHAPTER 2

WHO IS WATCHING OVER YOU?

THE ROLE OF SHARED IDENTITY IN PERCEPTIONS OF SURVEILLANCE¹

"You had to live – did live, from habit that became instinct – in the assumption that every sound you made was overheard, and, except in darkness, every movement scrutinised." George Orwell, *Nineteen Eighty-Four* (Orwell, 1949).

While surveillance is clearly not at the level portrayed in *Nineteen Eighty-Four*, with 'Big Brother' appearing on the television, rather than watching through the telescreen, levels of surveillance are at an extremely high level in modern society². For example, BBC News (2002) reported that the average UK citizen is captured on closed circuit television (CCTV) 300 times per day (see also Armitage, 2002; Short & Ditton, 1998). Much research into surveillance has focused on its *intended* outcomes and assesses, for instance, the effectiveness of surveillance systems in deterring crime or in promoting productivity at work (e.g., D'Urso, 2005, 2006; Welsh & Farrington, 2003). Implicit in such research, we would argue, is the notion that people will be more accepting of surveillance if it is effective in achieving those goals. However, such a focus neglects the fact that people may be concerned about the use of surveillance for other reasons too: many feel it implies a lack of trust,

¹ This chapter is an adapted version of O'Donnell, Jetten, & Ryan (in press-b)

² While we realise that some scholars consider surveillance to have reached a higher level than that depicted in *Nineteen Eighty-Four*, we consider that visual surveillance has not extended to monitoring within private residences, and this is what we mean here.

infringing privacy and civil liberties in both the workplace (Lee & Brand, 2005; Whitty & Carr, 2006) and in public spaces (Honess & Charman, 1992).

In the present research, we depart from previous psychological analyses of surveillance in that we suggest surveillance is not seen as simply good or bad, but that its perception may be affected by additional factors. For example, D'Urso (2006) suggests that the direct relationship between increased surveillance levels and various negative outcomes such as reduced job performance and workplace satisfaction, may be moderated by an individual difference variable, 'perceived surveillance concern'. Even though such individual difference moderators may be important in explaining the conditions under which surveillance will be accepted, this may only explain part of the process. In an attempt to complement previous analyses, in the present research we focus on the way in which surveillance perceptions are affected by contextual influences relating to the source of the surveillance. The social identity approach, comprising social identity theory (SIT; Tajfel & Turner, 1979, 1986) and self-categorisation theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), provides a platform from which to understand the way in which the source of surveillance, and identification with that source, can affect the acceptability of surveillance. In particular, the social identity approach helps us to predict when people may see surveillance as limiting or undermining their freedom, and when surveillance is accepted and even endorsed by those that are being watched. Building on previous research demonstrating that group membership or identification with a given group can shape the effectiveness of social influence attempts (Haslam, Powell, & Turner, 2000; Turner, Wetherell, & Hogg, 1989), we propose that the level of identification or salience of the identity can affect whether surveillance is construed as beneficial to the group, or as

undermining the privacy of those being watched. Thus, rather than simply being seen as a source of control and power (Turner, 2005), under specific circumstances surveillance can be seen as an expression of group-based protection for the safety of oneself and fellow group members.

The Role of Social Identity

In order to understand when individuals will accept CCTV and when they will resist it, it is important to consider the way they see themselves and the way they see the source of surveillance. More specifically, according to the social identity approach, when people define themselves as sharing group membership, other group members are more likely to be perceived as valid sources of information about the appropriate way to think and behave in that situation. Essentially, we believe that group membership guides behaviour and attitudes (see Turner, 1991; Turner et al., 1989). There is a large body of research that provides empirical support for this idea. For example, McGarty, Haslam, Hutchinson, and Turner (1994) demonstrated that when participants' group membership was made salient, they were more open to persuasion from an in-group member than an out-group member and could also recall information from an in-group member more accurately than information provided by an out-group member. Furthermore, it has been found that people find something more funny if other in-group members find it funny (Platow et al., 2005). Other research has shown that individuals are more open to influence from in-group members than similar influence attempts from outgroup members (e.g., Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; McGarty, Turner, Hogg, David, & Wetherell, 1992), that the way stressors are appraised depends on whether the situation is perceived as stressful by an in-group or out-group member (Haslam, Jetten, O'Brien, & Jacobs, 2004; Haslam, O'Brien,

Jetten, Vormedal, & Penna, 2005), and that group-directed criticism is more accepted when it is expressed by in-group members than when the same criticism is voiced by out-group members (Hornsey, Oppes, & Svensson, 2002). Together, this research demonstrates that the same behaviour or situation is interpreted differently depending on whether it is related to an in-group or out-group source. That is, whereas we assume that fellow in-group members share our values and that they will be acting in the group's best interests, more negative motivations are attributed to out-group members' actions.

In applying this reasoning to surveillance, Levine (2000) argued that knowing people's group membership is necessary in order to determine how they will react to being under surveillance. Levine's account takes as its basis the notion that reactions and behaviour following from the perception of being surveilled should vary markedly as a function of the identities of both the watcher and the watched. As Levine points out, a social identity analysis would never expect behaviour to differ merely according to whether one is under surveillance or not – what matters is who one is visible (or invisible) to. Indeed, Dixon, Levine, and McAuley (2003) also note that identifying more strongly with a place is associated with a more positive evaluation of CCTV in that place. The reasoning we take from Levine and colleagues, then, is that reactions to being under surveillance, and behaviour resulting from this, are defined by the salience and content of social identities. In the studies presented in this chapter, we attempt to empirically investigate the theoretical suggestions made by Levine (2000). That is, we argue that in order to fully understand the effects of surveillance, it is necessary to consider the relationship between those who are being watched and the source of the

surveillance. More specifically, we need to assess whether the source of surveillance and those that are being watched share social identity.

Extending these ideas, we argue that whether there is a shared sense of identity between those that are being monitored and the source of surveillance will affect the degree to which surveillance is seen as an invasion of privacy (RQ 3). This is particularly likely to be the case when the reason for introducing surveillance is open to multiple interpretations. For example, in the case of CCTV surveillance in public settings, this may be perceived either as promoting the safety of those in the area or as motivated by a lack of trust in residents. We suggest that a shared sense of identity with the source of surveillance is likely to encourage watched individuals to interpret surveillance in terms of benefits that exist for the group (e.g., improvements in safety). In contrast, when identity between the source of the surveillance and those being watched is not shared, it is more likely that surveillance will be perceived as control and will therefore be interpreted as an invasion of privacy (RQ 4). In this research, relying on social identity reasoning, we aim to identify when surveillance will be seen as the overbearing, invasive monitoring of an Orwellian "Big Brother", and when it will be seen as the concerned protection of one who cares.

The Present Research

Two studies were conducted examining individuals' interpretations of CCTV surveillance. This type of surveillance is one of the most common forms of surveillance, and is particularly ubiquitous in the UK. For example, according to Privacy International (2007), the UK is categorised as an 'endemic surveillance society'. According to the same report, the UK has one of the worst records for visual surveillance, both in terms of the prevalence of surveillance and the misuse of

information. BBC News reported in 2006 that at this time, there were estimated to be around four million CCTV cameras in use in the UK, and noted that surveillance in the UK also extends to data collected from credit card transactions, Oyster travel cards, phone tapping and health records. A report from the Surveillance Studies Network (2006) argues that the complex infrastructure of surveillance in the UK implies, by its very existence, that the gathering of personal data has become commonplace and apparently necessary. Thus, within this pervasive surveillance environment we examined the effect of identification (Study 2.1) and identity salience (Study 2.2) on perceptions of privacy infringement and appraisals of the purpose of surveillance.

More specifically, Study 2.1 provides a correlational examination of perceptions of CCTV surveillance within the centre of a small UK city. We examine the effect of city identification on perceptions of privacy infringement and appraisals of the purpose of CCTV surveillance. Study 2.2 provides an experimental investigation of individuals' perceptions of surveillance as a function of whether their salient social identity was either shared or not shared with the source of surveillance.

We predict that if one does not sufficiently identify with the group, or if the surveillance is introduced by an out-group source, then surveillance is more likely to be seen as infringing on one's privacy, compared to when identification with the group is higher or if the source of the surveillance is perceived as an in-group member. Furthermore, we predict that these variations in the appraisals of surveillance will be due to different attributions about the purpose of the surveillance. If identity is shared, surveillance - such as CCTV in public spaces - is more likely to be appraised as protecting the interests of the in-group (i.e., as

ensuring the personal safety of in-group members). When identity is not shared, however, surveillance is more likely to be appraised as having a malign purpose, such as limiting individual freedom. In other words, we predict that surveillance effects on perceptions of privacy invasion will be mediated by attributions about the purpose of surveillance.

Study 2.1

In the context of CCTV cameras in the city centre, we predicted that people would consider the use of surveillance as less of an invasion of their privacy the more highly they identified with their city (related to RQ 3). Moreover, we predicted that this relationship would be mediated by appraisals of purpose— in particular, that surveillance is beneficial for the group because it enhances safety on the street (RQ 4). Specifically, we predicted that the more people identified with their city, the more they would appraise surveillance as being used to improve safety and this should decrease perceptions of privacy infringement.

Method

Participants

One hundred and twelve residents of Exeter, a small city in the South-West of England, voluntarily took part in the study. Participants were aged from 16 to 73 with a mean age of 26 (three individuals did not indicate their age). There were 58 males and 53 females (one individual did not indicate their gender).

Procedure

Participants were approached in the city centre and asked to complete a short questionnaire. They were then invited to read an information sheet which contained study information and contact details of the researchers. The study was presented as an investigation into how people feel about surveillance, specifically

CCTV, in use in their city centre. Participants responded to all items on a 7-point Likert scale, with responses ranging from (1) "strongly disagree" to (7) "strongly agree." After completing the measures, participants were requested to provide information on their age and gender.

Measures

Identification. Two items (adapted from Doosje, Ellemers, & Spears, 1995) were used to assess identification with the city. The items were "I feel a strong sense of belonging to Exeter" and "I feel strong ties with people from Exeter," r = .62, p < .01.

Privacy infringement. Participants completed six items (adapted from Alge, Ballinger, Tangirala, & Oakley, 2006) on the degree to which they felt CCTV in the city infringed on their privacy. Items were, "It is acceptable that there is CCTV in use" (reversed), "The presence of CCTV cameras is an invasion of my privacy," "I have little reason to be concerned about my privacy here" (reversed), "The fact that there are CCTV cameras makes me uneasy," "I can completely understand why there are CCTV cameras in use" (reversed), and "I feel like someone is always watching me" ($\alpha = .73$).

Appraisal of purpose of surveillance. Participants completed six items to indicate the extent to which they felt that surveillance was used for the purpose of safety. The items were "For my safety," "For the safety of others," "Because of previous incidents," "To prevent theft," "To prevent misbehaving," and "To prevent violence" ($\alpha = .76$).

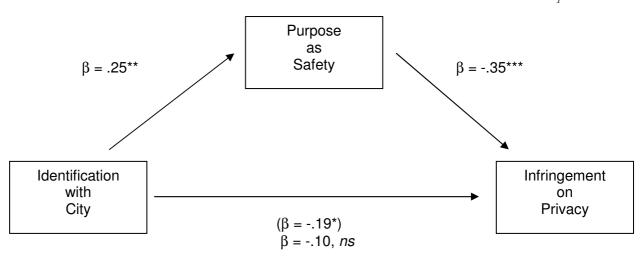
Upon completion of the questionnaire participants were debriefed in full and given a chocolate bar as compensation.

Preliminary Analyses

On average, participants tended not to see CCTV as an infringement on privacy (M = 2.40, SD = 0.85). Identification with the city was relatively high (M = 4.73, SD = 1.41) and participants agreed that the purpose of CCTV was ensuring safety (M = 5.67, SD = 0.80). Correlational analyses revealed that overall, identification with the city was significantly and positively related to perceiving the purpose of CCTV as safety, r = .25, p < .01, and negatively related to perceptions of privacy infringement, r = -.19, p = .05. Furthermore, perceiving the purpose of CCTV as safety was significantly negatively related to perceptions of privacy infringement, r = -.38, p < .01.

Given the varied age range of the sample, we examined whether age and gender affected responses to the main variables. Only age was negatively related to perceptions of privacy infringement, with younger people perceiving CCTV as infringing more on their privacy, r = -.23, p = .02. However, this relationship did not affect the relationships reported below and we therefore do not control for age. *Mediational Analyses*

Following recommendations by Baron and Kenny (1986), mediational analysis was conducted to examine whether the relationship between identification and perceiving surveillance as an infringement of privacy was mediated by appraisals that the purpose of CCTV was ensuring safety (see Figure 2.1). Regression analysis confirmed the effect of identification on perceived infringement of privacy, $\beta = -1.97$, p = .05. Further analyses demonstrated that identification significantly predicted the appraisal that the purpose of CCTV was for safety, $\beta = .25$, t = 2.64, p = .01. When safety was entered into the equation, the effect of identification on



Note: ***p < .01; **p = .01; *p = .05

Figure 2.1 Path diagram illustrating that belief about the purpose of CCTV mediates the effect of identification with the city on perception of privacy infringement

perceived infringement of privacy became non-significant, β = -.10, t = -1.07, p = .29, and the belief that CCTV is for safety was negatively related to perceptions of privacy infringement, β = -.35, t = -3.73, p < .01. A Sobel test revealed that appraisal of safety purposes was a significant mediator (Z = -2.16, p = .03).

Discussion

Consistent with our predictions, those who identified more strongly with their city were also less likely to perceive surveillance as an infringement of privacy. Further analyses showed that attributing the purpose of surveillance as consistent with group interests (i.e., ensuring safety) mediated this relationship. This suggests that identifying with a group is associated with variations in the way surveillance is perceived. With increasing levels of identification, perceptions of surveillance as ensuring safety also increase, and perceptions of surveillance as invading privacy decrease. Thus, support was found for our hypotheses related to Research Questions 3 and 4.

Although the results of Study 2.1 provide support for our hypotheses, the correlational nature of this study clearly has its limitations. It could be argued, for example, that greater identification with one's city is also related to other variables (such as being more law abiding, or having lived in the area for longer) that are associated with acceptance of surveillance, and that these factors actually influence perceptions of surveillance. In order to rule out alternative processes that may have affected the relationship between group identification and perceptions of surveillance, and to provide evidence for a causal effect of social identity on perceptions of surveillance, we conducted a second study where we manipulated identity (by way of an identity salience manipulation) to examine our research questions in a more controlled way. Another aim of the second study was to examine more closely the way in which the relationship between the target of surveillance and the source of surveillance affects perceptions of privacy infringement.

Study 2.2

Study 2.2 was an experimental investigation of perceptions of surveillance. We examined our hypotheses in a student hall of residence at the University of Exeter. We chose a large hall of residence with a well-established identity. CCTV cameras are used to monitor the hall corridors when tutors cannot be present. In this setting, students may view their group memberships at a number of levels. They may categorise themselves at a higher, superordinate level, by seeing themselves as a member of the university as a whole. In contrast, they may also categorise themselves at a lower level of identity, by seeing themselves in a subgroup within the university, as a member of their hall of residence. The latter identity is a less inclusive identity, nested within the former. In this study, we utilised the multi-level

nature of these identities in order to test our hypothesis that shared identity with the source of surveillance would reduce infringement of privacy perceptions. In line with previous research, we predict that such attitudes will be determined by the relative salience of these identities (Ashforth & Johnson, 2001; Oakes, 1987; Oakes, Turner, & Haslam, 1991).

In Study 2.1, we assessed whether people were more accepting of surveillance when they identified more with the city it targeted. In this study, we build on this finding by manipulating identity salience and source of surveillance and hence examining the causal link. As outlined above, who is seen as an in-group member and who is seen as an out-group member depends on the level at which individuals categorise themselves. We predicted that when source of surveillance and identity salience were concerned with the same identity, surveillance was least likely to be perceived as privacy infringement (related to RQ 3). Thus, we predicted that privacy infringement perceptions would be relatively low when the hall of residence was the source of surveillance and a resident identity was salient, and when the university was the source of surveillance and a university identity was salient. However, given the fact that the hall of residence identity is nested within the university identity, we predicted that privacy infringement perceptions would also be relatively low when the university identity was salient and the source of surveillance was the subgroup hall of residence identity. This prediction is in line with selfcategorisation theory reasoning that these judgements are made in the context of whether there is a shared superordinate identity (Mummendey & Wenzel, 1999; Turner et al., 1987). It is only in this condition that the source of the surveillance is part of the salient identity. In contrast, when hall identity was salient but the source of surveillance was university members, participants were predicted to experience

most privacy infringement, because identity between source and identity of the target would not be shared.

We also predicted that the effect of both factors on perceptions of privacy infringement would be mediated by appraisals of the purpose of surveillance as ensuring safety (related to RQ 4). Initial level of identification with the hall of residence was measured alongside the dependent measures. To control for any pre-existing differences in identification that may affect the extent to which the salience manipulation is effective, we controlled for group identification in our analyses.

Method

Design

The experiment consisted of a 2 (Identity salience: Resident vs. University) x 2 (Source of surveillance: Fellow residents vs. University members) factorial between-participants design. Both factors were manipulated and participants were randomly allocated to conditions.

Participants 1 4 1

Participants were an opportunity sample of 139 undergraduate students at the University of Exeter, recruited in and around the specific university hall of residence where they lived. They took part voluntarily. Participants were aged from 18 to 22 with a mean age of 19 years, although 19 individuals did not indicate their age. The study included 57 males and 72 females (10 participants did not indicate their gender).

Procedure

Manipulation of identity salience. Participants were first informed that the researchers were interested in the thoughts of either residents of the specific residence or of residents of university accommodation more generally, on the

presence of CCTV cameras in their residence and about living there in general. Participants were also told that members of other residences/universities were being surveyed as well (depending on condition). In order to reinforce the salience manipulation, participants were then asked to list three things that they liked about *either* living in their specific residence (in the residence condition) *or* about the university as a whole (in the university condition; Haslam, Oakes, Reynolds, & Turner, 1999). This manipulation has been used successfully in previous research to manipulate relative identity salience (e.g., Adarves-Yorno, Postmes, & Haslam, 2006; Halloran, 2007).³

Manipulation of source of surveillance. Participants then read a short paragraph reminding them of the CCTV cameras in place in their accommodation. They were then told either that fellow residents of that specific hall had petitioned the university to have CCTV installed (in the residents source condition), or that people from various groups within the university had requested the instalment (in the university source condition).

Dependent Measures

Following the manipulations, participants were asked to complete a questionnaire containing the dependent variables. Participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

condition (M = 7.32, SD = 3.08), $F(1, 30) = 5.25, p = .03, \eta_p^2 = .60.$

Given the close nesting of identities used in this study, a follow-up study was conducted to check the effectiveness of the identity salience manipulation in manipulating relative salience. A different sample of 35 participants living at the same hall of residence encountered the same manipulations as in the main study, then completed a visual analogue scale, where they were asked to draw an X on a line to represent themselves in the current moment. This measured from 0-13.1cm, with hall of residence represented on the left and the university represented on the right. Analysis of variance showed that those in the university identity salience condition marked themselves significantly nearer to the university end of the line (M = 9.79, SD = 2.98) than did those in the hall of residence identity salience

Identification. Three items adapted from Doosje and colleagues (1995) were used to assess identification with the specific hall of residence. The same two items from Study 2.1 were used, plus an additional item: "I am happy to be a member of [hall of residence]" ($\alpha = .80$).

Privacy infringement. The same six items as used in Study 2.1 were included to assess the extent to which participants felt CCTV in their hall of residence infringed on their privacy ($\alpha = .77$).

Appraisals of purpose of surveillance. As in Study 2.1, participants rated to what extent they felt that surveillance was used for safety ($\alpha = .82$).

Following completion of the questionnaire, participants were thanked for their time, given the debriefing sheet, and were offered a chocolate bar as compensation for taking part.

Results

Preliminary Analyses

Preliminary analyses revealed that identification with the specific hall of residence was a significant covariate when analysing the effects of identity and source of surveillance. We therefore controlled for group identification in the analyses reported below.

Privacy Infringement

A 2(Identity) X 2(Source) analysis of covariance (with hall of residence identification as the covariate) was carried out on the privacy measure to assess the effects of salient identity and source of surveillance on perceptions that CCTV infringes on one's privacy. The analysis revealed that the covariate was significant, F

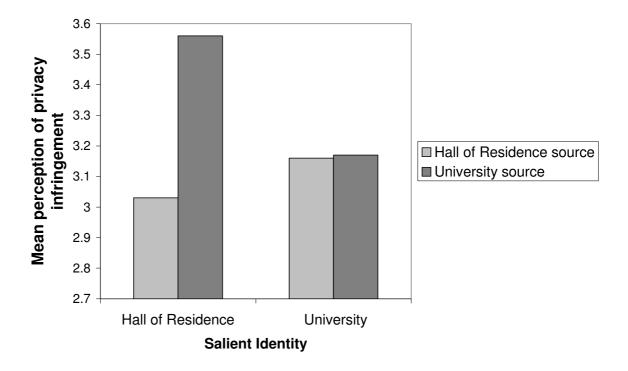


Figure 2.2 Mean perception that surveillance infringes on one's privacy, as a function of identity salience and source of surveillance

(1, 134) = 7.82, p < .01, $\eta_p^2 = .06$. In addition, only the predicted interaction was found to be significant, F(1, 134) = 3.83, p = .05, $\eta_p^2 = .03$ (see Figure 2.2, above). In line with predictions, there were no differences in perceived privacy invasion when identity salience matched the source of surveillance. Thus, simple main effects showed that when university identity was salient, there was no significant effect of source of surveillance on perceptions of privacy infringement, F(1, 134) = 0.08, p = .77, $\eta_p^2 = .01$. Furthermore, privacy infringement perceptions did not differ depending on identity salience when the source of surveillance was fellow residents, F(1, 134) = 1.16, p = .28, $\eta_p^2 < .01$. However, as predicted, privacy invasion perceptions did differ when the identity that was salient did not encompass the source of surveillance. As such, when the hall of residence identity was salient, perceptions that CCTV infringes on one's privacy was higher when the source of the surveillance was members of the university (M = 3.56, SD = 1.40), than when

the source was fellow residents (M = 3.03, SD = 0.95), F(1, 134) = 6.72, p = .01, $\eta_{\rm p^2} = .05$. Finally, when the source of surveillance was the university, privacy infringement perceptions were marginally lower when the university identity was salient (M = 3.17, SD = 0.88) than when the resident identity was salient (M = 3.56, SD = 1.40), F(1, 134) = 2.94, p = .09, $\eta_{\rm p^2} = .02$.

Appraisals of Purpose of Surveillance

A 2(Identity) X 2(Source) analysis of covariance (with hall of residence identification) on the perception that CCTV serves safety purposes, revealed that the covariate was significant, F(1, 133) = 22.50, p < .01, $\eta_{\rm p}^2 = .15$. In addition, no significant main effects were found, but the predicted interaction was significant, F(1, 133) = 4.65, p = .03, $\eta_{\rm p}^2 = .03$ (see Figure 2.3, below). In line with the privacy infringement findings, when the source of surveillance was university members, participants were significantly more likely to attribute CCTV as ensuring safety

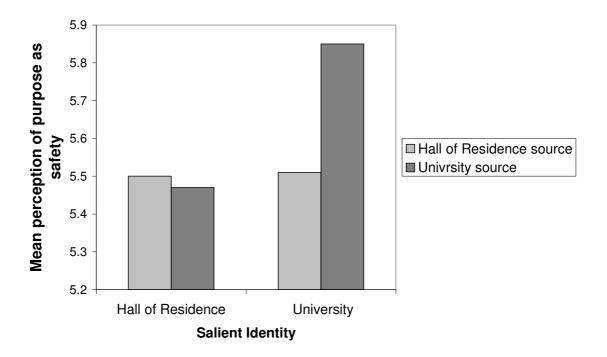
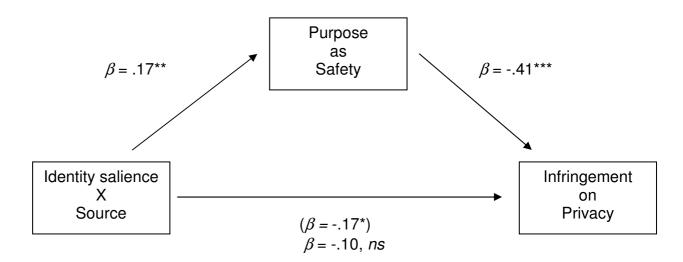


Figure 2.3 Mean perception that the purpose of surveillance is safety, as a function of identity salience and source of surveillance

when a university identity was salient (M = 5.85, SD = 0.53), rather than a halls of residence identity (M = 5.47, SD = 1.19), F(1, 133) = 4.51, p = .04, $\eta_{\rm p}{}^2 = .03$. In addition, simple main effects analysis showed that when a university identity was salient, and the CCTV was requested by university members, participants were significantly more likely to appraise the CCTV as serving safety purposes (M = 5.85, SD = 0.53) than when the source of surveillance was other residents (M = 5.51, SD = 0.94, F(1, 133) = 4.59, p = .03, $\eta_{\rm p}{}^2 = .03$. There were no other significant simple effects.

Mediational Analyses

A series of regression analyses were conducted to examine whether the perceived purpose of surveillance mediated the interactive effect of identity salience and source of surveillance on perceptions of privacy infringement. In line with guidelines for conducting mediated moderation (see Aiken & West, 1991; Baron & Kenny, 1986; Muller, Judd, & Yzerbyt, 2005), identity salience and source of



Note: *** p < .01; ** p = .03; * p = .05

Figure 2.4 Path diagram illustrating that belief about the purpose of CCTV mediates the effect of the interaction between identity salience and source of surveillance on perception of privacy infringement

surveillance were dummy coded, and the interaction term was calculated by multiplying the two variables. As recommended by Muller and colleagues, the independent variables were contrast coded as resident identity (-1), university identity (+1); residents source (-1), university source (+1) and the mediator (appraisal of surveillance as serving a safety function) was centred so that its mean was zero but its standard deviation remained the same. In these analyses, identification with the hall of residence was always entered at Step 1, and the main effects and their interaction were entered at Step 2. The analyses showed that the requirements for demonstrating mediated moderation were met. In the first stage of analysis, regression analyses with the independent variables, identity salience and source of surveillance, and the interaction term confirmed the significant interaction between identity salience and source of surveillance on perceptions of privacy infringement, $\beta = -.17$, p = .05. Secondly, the significant interaction between identity salience and source of surveillance on appraisals of CCTV as ensuring safety was confirmed, $\beta = .17$, p = .03. A third analysis was conducted where appraisals of CCTV as ensuring safety was entered at Step 2 with the independent variables, and with perceptions of privacy infringement as the criterion. This analysis revealed that appraisals of the purpose of CCTV as safety negatively predicted perception of privacy infringement, $\beta = -.41$, p < .01, and the interaction was reduced to nonsignificance, β = -.10, p = .22 (see Figure 2.4, previous page). A Sobel test showed that the mediator was significant (Z = -.1.98, p = .05).⁴

Please note that according to the guidelines from Muller and colleagues (2005), mediated moderation may be demonstrated either by the moderator affecting the treatment effect on the mediator, or by the moderator affecting the mediator's effect on the outcome, or both. Here we have demonstrated the first type of mediated moderation (see second stage of analysis). We tested the second type of mediated moderation both ways – with each IV tested as the moderator – and found no significant interaction between moderator and mediator on the outcome variable.

Discussion

In line with predictions, we found that surveillance was perceived more as an invasion of privacy when the identity salient to the target of surveillance did not include the source of surveillance, compared to when identity was shared, or included the source of surveillance within it (relevant to RQ 3). Further analyses revealed that this interactive effect of identity salience and source of surveillance was mediated by the appraisal that surveillance served safety purposes (RQ 4).

These results build upon those of Study 2.1 by replicating the effects of identity on acceptance of surveillance in a context where the salience of identity was manipulated, rather than identification being measured. Study 2.2 also revealed some evidence that source of surveillance played a role in perceptions of privacy infringement and purpose. In particular, it mattered whether the source was perceived to share an identity with the identity that was salient. When the source of surveillance was not part of the salient identity, but a higher order categorisation, perceptions that surveillance infringes on privacy were highest. That is, even when the surveillance came from a single source (the university) it was accepted when a university identity was made salient and the source was therefore considered an ingroup, but *not* when sub-group identity was salient and accordingly the source was considered an out-group.

General Discussion

The two studies presented here demonstrate that reactions to surveillance can be understood more comprehensively by considering whether identity is shared with those who have introduced the surveillance. Study 2.1 demonstrated that higher identification with one's city was associated with decreased perceptions that CCTV surveillance invaded privacy. Based on the reported mediation effect, we

would argue that this is because when identification was higher, individuals tended to believe that the surveillance was there to promote the safety of themselves and other in-group members (residents of their city).

In Study 2.2, we extended these findings by demonstrating that it is not just identification that is important, but also that the group needs to be contextually relevant. Even when controlling for identification, we found that identity salience, and a fit between this salience and the source of surveillance, was important. We demonstrated that when a subordinate identity was salient and surveillance originated from a superordinate group (that encompasses their subgroup); people perceived surveillance more as privacy infringement than when the source was their less inclusive identity. However, when a superordinate identity was salient and the source of surveillance was included in this identity, there were no significant differences in privacy invasion perceptions. Echoing Study 2.1 results, this pattern was found to be mediated by appraisals that the purpose of surveillance is to benefit the in-group by promoting their safety. By examining nested identities we were able to assess how changes in the salience of identity can affect acceptance of surveillance, even when it comes from the same source. This supports our broader point that perceptions of surveillance are not static and given, but continually changing as a function of the context.

In sum, both studies provide support for the notion that shared group membership with the source of surveillance positively affects perceptions of surveillance (RQ 3). In contrast to surveillance literature which either suggests that surveillance is predominantly perceived as negative (Honess & Charman, 1992; Whitty & Carr, 2006) or blithely accepted (Davies, 1998) the present research demonstrates that these perceptions vary as a function of whether the perceiver

identifies with the source of surveillance. This is because when there is a shared identity, surveillance is perceived as being used by the in-group in order to benefit other in-group members (i.e., their safety; RQ 4). The fact that the present research acknowledges and actively investigates factors such as group membership and identification, which influence how people feel about surveillance, makes it an advance on much of the surveillance literature that has gone before (relating to RQs 1 & 2).

We have accounted for these findings with reference to a social identity approach (Tajfel & Turner, 1979; Turner et al., 1987). The present research has added to this body of literature by demonstrating that people are less likely to see surveillance as an invasion of their privacy if it is perceived as being implemented or requested by fellow in-group members. Our findings resonate with previous research which proposes that shared group membership is a precondition for mutual intra-group influence (Turner, 1987a, 1991). Because people expect to agree with in-group members and assume that these group members have their best interests at heart, they view surveillance more positively (i.e., as less invasive) if it is imposed by fellow in-group members. We also provided evidence in both studies that these processes underlie the effect that in-group surveillance is less invasive than out-group surveillance.

Future Research

The research of the present chapter raises questions that are related to, but outside the scope of those it set out to address. For example, we have shown that surveillance is seen as less privacy infringing by those who share identity with the source of surveillance, because they appraise it as benefiting the safety of their ingroup. It is likely that shared identity can elicit other types of appraisals. For

example, if one views the purpose of surveillance as promoting productivity (e.g., in a workplace), this could be seen as positive if one identifies with the group. However, the same surveillance would probably be seen as negative for those who do not identify with the group (e.g., leadership imposing their will, using surveillance to make employees work harder). Future research should examine the effects of surveillance on performance and productivity as a function of whether identity is shared, and this question will be addressed later in this thesis (Chapter 4). Furthermore, whereas our findings provide evidence for the importance of appraisals of the purpose of surveillance, it remains to be examined whether these effects are limited to surveillance that is perceived as beneficial for the in-group. If it is the case that surveillance from in-group members is more acceptable precisely because we assume they are using surveillance for our own good, it may well be the case that surveillance for the greater good may not be appraised that positively despite the fact that an in-group source proposes it. This issue will be examined in the next chapter of this thesis.

In addition to the underlying mediating processes that affect the acceptance of surveillance that we have examined here, it is worth mentioning that that there may be a host of other possible mediating factors. One other important mediator (not mentioned so far) would be differential trust as a function of shared identity with the source of surveillance — in-group sources are likely to elicit a greater sense of trust than out-group sources (Jetten, Duck, Terry, & O'Brien, 2002; Tanis & Postmes, 2005). That is, it is possible that those sharing identity with the source of surveillance consider surveillance less of a privacy invasion because of the greater trust in the source, and perhaps because there is a perception that this trust is reciprocated, with in-group sources trusting other in-group members more in

return. Arguably, perceptions of trust may mediate the effect of the manipulations of identity and source on the appraisal of surveillance and it is important in future research to examine this. The notion of trust will be investigated later in this thesis, in Chapter 5.

Conclusions

The present research advances upon extant research into how surveillance is perceived, in an attempt to move away from previous analyses that assume surveillance is seen as unacceptable and an invasion of privacy by all (see Honess & Charman, 1992; Lee & Brand, 2005; Whitty & Carr, 2006). We have applied the principles of the social identity approach (Tajfel, 1978; Turner et al., 1987) in order to explain when surveillance is seen as an invasion of privacy, and when it is *not* (Turner, 1991; Turner et al., 1989). Those who do not identify strongly, or have a different social identity currently salient, tend to find surveillance more negatively and view it as an invasion of their privacy. However, for those identifying more strongly, or for those who share a sense of social identity with the source of surveillance, surveillance seems much more accepted. Rather ironically, this finding fits quite well with the aims of CCTV surveillance from the point of view of those who implement it: those who dislike the use of CCTV are likely to be the ones it targets because they do not share identity with us.

In sum, previous research into surveillance has not examined social contextual factors, which makes it very difficult to explain why surveillance is at times perceived as unacceptable but at other times accepted as something that can benefit individuals and groups (e.g., Honess & Charman, 1992; Lee & Brand, 2005; Whitty & Carr, 2006). In line with Levine (2000), we have demonstrated that in order to comprehend how surveillance will be perceived, it is necessary to know the

identities of both the watcher and the watched. It seems that if people live with the knowledge that "every sound you made was overheard, and, except in darkness, every movement scrutinised" (Orwell, 1949), they may, depending on whether identity is shared with the source of surveillance, either interpret this as the caring protection that might be expected of a parent or as an overbearing Big Brother imposing his or her will.

CHAPTER 3

WATCHING OVER YOUR OWN:

HOW SURVEILLANCE MODERATES THE IMPACT OF SHARED IDENTITY ON PERCEPTIONS OF LEADERS AND FOLLOWER BEHAVIOUR⁵

"...the perfection of power should tend to render its actual exercise unnecessary..." Foucault, *Discipline and Punish*: *The Birth of the Prison* (1977, p.201).

"The perfection of power", as Foucault describes it, refers to a power so absolute that it need not be exercised. Such complete control could arise from the omnipresence of power afforded by the extensive use of surveillance, or from genuine influence, whereby individuals are inspired to comply without the need for coercion. Indeed, there are a number of ways in which a leader may influence his or her followers (Bass, 1985; Haslam, 2004; Reynolds & Platow, 2003; Simon & Oakes, 2006; Turner, 2005). A leader may utilise the power inherent in any leadership position, by enforcing rules and ensuring such rules are followed by the use of monitoring and surveillance. In contrast, a leader may benefit from common ground; a shared sense of identity that motivates followers to cooperate to achieve a joint goal.

In the present chapter, we investigate the way in which these two types of power interact. Importantly, we argue that these two forms of leadership – realised

⁵ This chapter is an adapted version of O'Donnell, Jetten, & Ryan (in press). Study 3.1 reports data that were included in the candidate's dissertation submitted to the University of Exeter for the degree of Master of Science in Social and Organisational Psychology, completed as part of a four year ESRC PhD studentship. However, the manuscript has been re-written, new data collected (Study 3.2), and the data from Study 3.1 have been re-analysed. This is compatible with the University's Statement of Procedures for the Presentation of Theses/Dissertations for the Degree of PhD, [2.1].

through the enforcement of power via surveillance, or through influence afforded by a shared identity – do not necessarily sit well together. Although we have demonstrated that a shared social identity may influence followers to accept surveillance from their leaders (Chapter 2; RQs 3 & 4), leaders who attempt to use both types of power simultaneously, to maximise effectiveness, may well experience resistance from followers rather than cooperation. In particular, if leaders who share an identity with their followers impose surveillance, they may experience negative repercussions because, by doing so, they may create the impression that identity is not shared after all. Because the perception of shared identity with a group leader – that this person is "one of us" – gives the leader a licence to act on behalf of the group and enhances the leader's capacity to influence and lead, any act that damages this perception may break the "one of us" perception and thereby form a fertile ground for follower resistance.

Understanding Leadership

Early approaches to leadership often assumed that the leader, a talented and charismatic individual, is the main actor in an organisation. Such approaches often focused on the 'right' way to manage people, without considering the input of those being managed (e.g., Taylor, 1911), or emphasised the notion that a leader's power arises from his or her position and individual attributes (Fleishman, 1953; Fleishman & Peters, 1962; Vroom & Yetton, 1973). However, more recently, others have argued that such attempts, with their focus on the leader rather than the group, are unable to predict how the leader is perceived by followers, and how the group as a whole will behave (Haslam, 2004; Haslam & Platow, 2001; Hollander, 1985, 1993, 1995; Reynolds & Platow, 2003).

In contrast to the early approaches, researchers from a social identity perspective argue that a leader's power comes from his or her ability to influence other group members. According to such an approach, a leader must be representative of his or her group in order to be influential, and will only have influence over those who identify with that group (Haslam, 2004; Reicher & Hopkins, 2003; Turner, 1991; Turner, Wetherell & Hogg, 1989). Moreover, in order for a leader to be influential, his or her actions must be in line with both what is expected from, and is beneficial for, the group (Haslam & Platow, 2001; Reynolds & Platow, 2003). Support for such an approach is provided by previous research which has shown that leaders are evaluated more positively (Platow, Hoar, Reid, Harley, & Morrison, 1997) and as being fairer (Haslam & Platow, 2001) when they are seen to act in the interests of fellow in-group members (see also Coch & French, 1948). Correspondingly, leaders can influence group members' behaviour without making overt influence attempts, with a shared sense of identity being enough to engender a greater willingness to work on behalf of the group (Jetten, Branscombe, Spears, & McKimmie, 2003; Van Dick, Hirst, Grojean, & Wieseke, 2007) and increased group loyalty (Ellemers, Kortekaas, & Ouwerkerk, 1999; Zdaniuk & Levine, 2001). In this way, leaders demonstrate their influence by inspiring followers to embrace group goals.

Thus, leadership is part of a group process in which the followers are implicated as much as the leader. Reflecting the importance of the group in accounts of leadership and power, social identity theorists have identified a contrast between power made possible through identity-based influence ('power through') and that which is afforded by a position of power, and realised purely through coercive methods ('power over'; Simon & Oakes, 2006; Turner, 2005). The 'power

through' influence process causes followers to be internally motivated to act in accordance with a leader's wishes. However, in conditions of 'power over', followers are externally motivated, and surveillance is one way in which a leader can ensure conformity by followers. Therefore, within this distinction, surveillance is a tool that is more likely to be used (and needed) by those leaders who have 'power over' than by those who have 'power through'.

In line with the above reasoning, we propose that the context in which surveillance is implemented by leaders, and in particular the relationship between leaders and followers, will be important in determining followers' perceptions of the leader and the sacrifices followers are willing to make for the group. Previous research tells us that surveillance is something expected from out-group members, not from those we share identity with (Simon & Oakes, 2006). Reynolds and Platow (2003) assert, in a related vein, that coercive power tactics in general ('social power') are reserved for out-group members, whereas in-group members have a more exclusive capacity for social influence. When a leader included in the in-group imposes a high level of surveillance, it is likely to affect how people feel about their leader and the group as a whole. This is because it sends conflicting messages: this person is a fellow group member, but is imposing high surveillance on in-group members. We argue that because the surveillance is unnecessary in this setting, the combination of shared identity and the high level of surveillance colours the appraisal of the aim of surveillance (RQ 5).

Understanding Surveillance

As outlined in Chapter 1, extant literature exploring surveillance often focuses on the effectiveness of surveillance systems in meeting their desired outcomes (e.g., Armitage, 2002; Sewell, 1998; Spitzmuller & Stanton, 2006; Welsh

& Farrington, 2003). Implicit in much of this literature is the notion that surveillance has a homogeneous effect on those who encounter it: if people are under surveillance, they will systematically change their behaviour. In addition, research investigating the unintended effects of surveillance has tended to report only the negative perceptions people hold of surveillance, suggesting that a view of surveillance as an infringement on privacy and civil liberties is ubiquitous (see Alge, Ballinger, Tangirala, & Oakley, 2006; D'Urso, 2005, 2006; Karat, Karat, Brodie, & Feng, 2005). Alternatively, some research reports that people hold disparate views of surveillance (i.e., surveillance is seen as acceptable by some and not by others). However, this research offers little or no explanation for the variation in opinion and these accounts are at times quite post-hoc (see Botan, 1996; Botan & Vorvoreanu, 2005; Honess & Charman, 1992; Short & Ditton, 1998).

The social identity model of deindividuation effects (SIDE; Reicher, Spears, & Postmes, 1995; Spears & Lea, 1994) helps to provide a more theory-driven account of effects of surveillance. Applying this model to CCTV surveillance, Levine (2000) notes that in order to understand the effects of surveillance we need to take into account who is imposing the surveillance, and the relationship between the surveillance imposer and those who are being watched. More specifically, he argues that people's behaviour will be affected by the identity of the instigator of the surveillance, and therefore who they are visible to (i.e., whether it is an in- or outgroup member; see also Dixon, Levine, & McAuley, 2003; Douglas & McGarty, 2001).

Recent research has supported the notion that perceptions of privacy invasion are not an inevitable consequence of being under surveillance. Instead, these perceptions are socially and contextually determined. In our previous

research, (Chapter 2; O'Donnell, Jetten, & Ryan, 2010) we found that one's willingness to accept surveillance is dependent on the source of the surveillance. If surveillance is imposed by an in-group source, surveillance is more likely to be accepted by targets because it is perceived as beneficial to the group and its members. In contrast, a lack of shared identity results in targets being more likely to perceive surveillance as an invasion of their privacy, because it is no longer seen as a tool to protect their safety. Thus, perceptions of shared identity affect attributions about the purpose of surveillance and this affects the extent to which surveillance is perceived as appropriate (RQs 3 & 4).

The Interacting Roles of Identity and Surveillance in Understanding Leadership

Taken together, the literature on leadership and on surveillance reveals a clear paradox. The very conditions that seem to make surveillance more acceptable also render it unnecessary. That is, leaders who share a sense of identity with their followers should be more likely to be seen as acceptable sources of surveillance, compared to leaders who are not perceived as in-group members (see Chapter 2; O'Donnell et al., 2010). However, because such leaders benefit from identity-based influence ('power through'), they do not *need* to use surveillance in order to ensure their followers do as they wish. This contradiction raises the question: although a shared sense of identity may in some situations lead us to condone surveillance, could the use of such surveillance in other situations reflect badly on a leader, resulting in a backlash from followers?

On this basis, we predict that where there is no shared identity between followers and the leader, surveillance can be perceived as a tool to exert 'power over' others. In such situations, surveillance does what it is supposed to do; followers will act in line with the leader's demands because of a fear of being caught

by the leader. Indeed, surveillance would be expected in such a context and would be consistent with the perception that there is a lack of shared identity between individuals. In contrast, when identity is perceived to be shared and the leader therefore has 'power through' others, the identity processes involved in such a relationship will ensure that followers will act in line with group norms and goals. Under such conditions, surveillance is unnecessary. Indeed, using surveillance when identity is shared may backfire and damage the positive effects that shared identity can have because leaders run the risk of changing the basis of influence from one of 'power through' to 'power over' (RQs 5 & 6). In other words, using surveillance when identity is shared suggests to followers that leaders may interpret the nature of their relationship differently than they do.

The Present Research

Two studies were conducted to examine the effects of social identity and surveillance on followers' evaluations of their leader and their subsequent behaviour. We tested our predictions by asking participants to consider a fictitious workplace environment. We investigated the effects of varying levels of shared identity with the leader, and varying levels of surveillance, on perceptions of leaders (Studies 3.1 & 3.2), willingness to work for the group (Study 3.2), and perceptions of surveillance as infringing privacy (Study 3.2).

Study 3.1

In Study 3.1, we tested Research Question 5, investigating the effect that different levels of surveillance would have on perceptions of a leader who either did or did not share an identity with participants in a workplace setting. Our dependent variable referred specifically to how much leaders were perceived to be team members, a measure that captures the notion that participants include the leader as a

member of their own group. It was predicted that, overall, a shared identity should result in greater perceptions of the leader as being part of the team than when identity was not shared. We also predicted that high surveillance would be detrimental to leader perceptions, such that a leader using high surveillance would be seen as less of a team member compared to when surveillance was low. Finally, we expected that surveillance and shared identity would interact. When identity was shared, high surveillance should undermine this shared identity, resulting in lower perceptions of the leader as a team member. However, we did not predict surveillance to have detrimental effects when identity is not shared because high surveillance would be consistent with expectations of 'power over'.

Method

Design

The study consisted of a 2 (Type of Identity: Shared vs. Non-shared) X 2 (Level of Surveillance: Low vs. High) factorial between-participants design. Both factors were manipulated and participants were randomly assigned to conditions. *Participants*

Eighty undergraduate students took part in this study. Participants were aged from 18 to 52 with a mean age of 23, although eight individuals did not indicate their age. There were 38 males and 41 females (one individual did not indicate their gender). Participation was voluntary and participants were entered into a prize draw for £100.

Procedure

Participants were approached in public and asked to complete a questionnaire. The study was presented as an investigation of people's reactions to different workplace environments, so participants were naïve regarding the

importance of social identity and level of surveillance to the study. Participants were asked to imagine they worked for a fictitious organisation, LogiCom. Shared identity and surveillance were manipulated, and participants completed the relevant manipulation check immediately after each manipulation. The second manipulation check was followed by the dependent variables. On completion, participants were given a debriefing sheet, explaining the background and purpose of the study.

Manipulation of shared vs. non-shared identity. Participants were shown a list of 15 scrambled sentences, and asked to unscramble them (see Srull & Wyer, 1979, for original use of this manipulation; and Chartrand & Bargh, 1996; Postmes, Spears, Sakhel, & de Groot, 2001; for similar use of scrambled sentences). For participants in the shared identity condition, the sentences related to the importance of group work and being part of a team in the workplace (e.g. "My group likes to work together to achieve a common goal"). For participants in the non-shared identity condition, the sentences related to the importance of working as an individual at work (e.g. "I prefer to work separately from my colleagues"). There were 11 target sentences, plus four neutral sentences that were included in both conditions (e.g. "Efficiency is important in the workplace").

Shared or non-shared identity was further manipulated by information about the fictitious organisation. Participants in the shared identity condition were told that they were part of a team that worked together toward common goals and objectives. Conversely, those in the non-shared identity condition were told that they worked alongside other people but that everyone was working towards their own objectives, and that there was an emphasis on individual productivity. These manipulations were developed in line with reasoning that one of the main ways employees may (or may not) identify with more senior colleagues is by seeing

themselves as part of the organisation as a whole, pursuing a common goal (or not; see Reynolds & Platow, 2003).

Manipulation of level of surveillance. Participants in the high surveillance condition were then told there was CCTV in the office and that a photo of their workstation was taken every ten minutes. They were also told that the length of each phone call and coffee break was monitored. In contrast, those in the low surveillance condition were told management was very hands-off and understood that different employees worked in different ways. It was explicitly mentioned that management did not check the use of restricted resources, and that employees did not feel very closely monitored.

Dependent Measures

Following each manipulation, participants were asked to complete manipulation checks, followed by measures of leader perceptions. Participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Manipulation checks. Four items checked the shared identity manipulation. Items were: "In this organisation, I would feel we are working towards a common goal," "In this organisation, we would work best as a team," "In this organisation, we would reach the best solutions together as a group" and "In this organisation, it would feel like we were all working towards the same objectives" ($\alpha = .88$). The surveillance manipulation was also checked with 4 items: "In this organisation, I would feel we are constantly monitored by management," "In this organisation, I would feel able to do the work as I see fit" (reversed), "In this organisation, I would feel constantly accountable to management" and "In this organisation, I would constantly feel someone was looking over my shoulder" ($\alpha = .92$).

Leader perceptions. Participants completed three items investigating how strongly they agreed that leaders in this organisation would be perceived as part of the group. The items were, "Leaders in this team would be sensitive to the views of those around them", "Leaders in this team would see themselves as part of a team" and "Leaders in this team would operate independently of other employees" (reversed), ($\alpha = .80$).

Results

Manipulation Checks

The effectiveness of the two manipulations was checked using two ANOVAs. Only a significant main effect of identity was found on the shared identity manipulation check, F(1, 78) = 37.78, p < .01, $\eta_{P}^2 = .34$. Perceived shared identity was higher in the shared identity condition (M = 5.46, SD = 1.13) than in the non-shared condition (M = 3.82, SD = 1.26). Analysis of the surveillance check revealed only a main effect on surveillance, F(1, 78) = 188.58, p < .01, $\eta_{P}^2 = .71$. Perceived level of surveillance was higher in the high surveillance condition (M = 5.91, SD = 0.96) than in the low surveillance condition (M = 2.89, SD = 1.01). It was concluded that both manipulations had been successful.

Leader Perceptions

Analysis of variance revealed, as expected, that there was a significant main effect of identity on ratings of leader perceptions, F(1, 73) = 10.37, p < .01, $\eta_{\rm p}{}^2 = .12$. Leaders were more likely to be seen as team players when identity was shared (M = 4.26, SD = .18) compared to when it was not shared (M = 3.45, SD = .18). Furthermore, it was also found that there was a significant main effect of surveillance on leader perceptions, F(1, 73) = 10.08, p < .01, $\eta_{\rm p}{}^2 = .12$. Leaders

were more likely to be perceived as team players when surveillance was low (M=4.25, SD=0.18) than when it was high (M=3.46, SD=0.17). However, as anticipated, these effects were qualified by a significant interaction between identity and surveillance, F(1,73)=5.53, p=.02, $\eta_{\rm p}{}^2=.07$ (see Figure 3.1 below). Simple main effect analysis showed that when identity was shared, leaders in the low surveillance condition (M=4.95, SD=1.00) were perceived more as team members than leaders in the high surveillance condition (M=3.57, SD=1.06), F(1,73)=15.49, p<.01, $\eta_{\rm p}{}^2=.18$. There was no effect of surveillance when social identity was not shared, F(1,73)=0.33, p=.57, $\eta_{\rm p}{}^2=.01$.

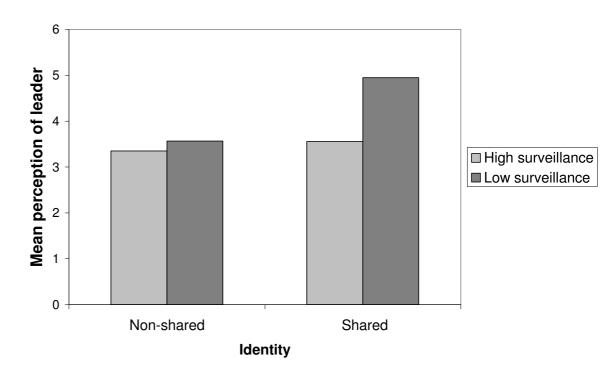


Figure 3.1 Mean perception of leader perceptions, as a function of type of identity and level of surveillance

Discussion

In line with predictions, those with a shared identity perceived leaders more as a part of their team than those who did not share identity. Perceptions of leaders as team members were also increased when surveillance was low as opposed to high. More interestingly, and as predicted, type of identity and level of surveillance

interacted: high levels of surveillance undermined the effects of shared identity, reducing perceptions of leaders as team members to levels comparable with conditions where identity was not shared. Our hypotheses based upon Research Question 5 were thus supported.

Study 3.1 demonstrated that using surveillance when identity is shared can have detrimental effects on perceptions of power holders. This finding supports the social identity argument that followers respond to leader actions. It appears that when the leader is someone with whom identity is shared but he or she imposes high surveillance, the shared sense of identity that was initially instilled will be destabilised. The act of imposing surveillance when it is not needed suggests to followers that the expectations they held regarding their leader and the nature of their relationship were perhaps misguided.

Study 3.2

We have argued that the undermining effect found in Study 3.1 occurs because high levels of surveillance violate expectations of leader behaviour in a context of 'power through'; however, this mediating mechanism remains to be demonstrated. A second study was conducted to replicate the effects of Study 3.1 and to examine the processes underlying the findings of Study 3.1. In line with our previous research (Chapter 2; O'Donnell et al., 2010) which demonstrates that evaluations of privacy infringement are dependent on identity-based processes, Study 3.2 examined whether the perceived situational appropriateness of surveillance — in terms of perceptions of privacy infringement — would underlie and mediate the effects on leader perceptions found in Study 3.1. We reasoned that if high surveillance was introduced where identity was shared, it would be seen as inappropriate or even as a breach of expectations given the relationship between

leader and followers. Specifically, given that measures of privacy infringement assess whether the surveillance in place is seen as fitting to both the situation and expectations, we examined whether perceptions of privacy infringement explain the undermining effect of surveillance observed in Study 3.1 (this can be seen as closely related to RQ 4). We predicted that leaders would be perceived less positively when identity was shared and surveillance was high (as compared to low) because the mixed message sent out in such situations would make it more likely that high surveillance was perceived as an infringement of privacy – as inappropriate use of power (RQ 5).

In addition, Study 3.2 examined whether the interactive effects of identity and leadership would extend beyond perceptions of the leader to behavioural intentions (RQ 6). In particular, we expand our focus in this study to examine willingness to work for the group (e.g., Jetten et al., 2003). This measure was conceptualised as helping colleagues, volunteering for extra work, and taking personal responsibility for the organisation's success. Willingness to work for the group is important because it demonstrates how influential leaders are. It allows us to disentangle compliance from genuine commitment, because it refers to behavioural intentions that are not strictly the focus of surveillance, and does not involve an overt influence attempt. It assesses the extent to which leaders are able to influence others to go over and beyond what is required (e.g., van Dick et al., 2007; Turner, 1987a, 1991; Turner et al., 1989).

In line with Study 3.1, we predicted that a shared identity between leaders and followers should result in higher ratings of leaders as team members and higher willingness to work for the group than when identity was not shared. In addition, we predicted that those experiencing higher levels of surveillance would perceive

leaders as less likely to be team members, to report more privacy infringement, and be less willing to work for the group than those experiencing low levels of surveillance. Moreover, in line with Study 3.1, we predicted that level of surveillance would moderate the effect of identity, such that shared identity would result in highest perceptions of leaders as part of the team, lowest perceptions of privacy infringement, and greatest willingness to work for the group, when surveillance was low than when it was high. Perceptions of leaders as acting inappropriately towards fellow in-group members (i.e., invading their privacy) should underlie the undermining effect of high surveillance on the positive effects of shared identity. That is, we also predicted that perceptions of privacy would mediate the effects of identity and surveillance on perceptions of leaders as part of the team.

Method

Design

The study consisted of a 2 (Identity: Shared vs. Non-shared) X 2 (Surveillance: Low vs. High) factorial between-participants design. Both factors were manipulated and participants were randomly assigned to conditions.

Participants

The sample consisted of eighty-four undergraduate students. Participants were aged between 18 and 48 with a mean age of 23 years, although 11 individuals did not indicate their age. There were 18 males and 57 females (9 individuals did not indicate their gender). Participation was voluntary and participants were offered a chocolate bar as compensation.

Procedure

Manipulation of shared versus non-shared identity. As in Study 3.1, shared identity was manipulated with scrambled sentences and through manipulations in the

workplace scenario. Participants unscrambled the same 15 sentences used in Study 3.1, which emphasised either shared on non-shared identity. They were then asked to imagine that they worked at a fictitious organisation and the shared identity manipulation was strengthened by providing feedback that goals were shared or not. The scenarios were identical to those used for Study 3.1.

Manipulation of level of surveillance. Participants then read more information on their fictitious organisation focusing on CCTV surveillance. These scenarios differed from those used in Study 3.1. In the low surveillance condition, participants were told there was one CCTV camera over the door to their office and that CCTV in this organisation was kept to a minimum. Note that this condition differed from Study 3.1 where there was no mention of surveillance in the low surveillance condition. Conversely, those in the high surveillance condition were told there were cameras over the doors, over the desks and over the coffee area, with 65 cameras in total.

Dependent Measures

Following each manipulation, participants were asked immediately to complete the relevant manipulation check. Next, they completed a questionnaire containing the dependent variables. Unless otherwise specified, participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Manipulation checks. The same four items as used in Study 3.1 were used to check whether identity was perceived to be shared or non-shared (α = .90). The surveillance check consisted of the four items that were used in Study 3.1 and one additional item ("This organisation would use a lot of CCTV surveillance"; five items, α = .87).

Leader perceptions. Participants completed the three items used in Study 3.1 and two extra items. These two were, "Leaders in this team would be similar to me," and "I would identify with leaders in this team" (five items, $\alpha = .87$).

Infringement on privacy. Participants completed six items (adapted from Alge et al., 2006) asking them to indicate the degree to which they felt that CCTV in the fictitious workplace would infringe on their privacy. Items were, "The presence of CCTV cameras is an invasion of my privacy," "I have little reason to be concerned about my privacy here" (reversed), "It is acceptable that there is CCTV in use" (reversed), "The fact that there are CCTV cameras makes me uneasy," "I can completely understand why there are CCTV cameras in use" (reversed), and "I feel like someone is always watching me" ($\alpha = .86$).

Willingness to work for the group. Participants were asked to complete 13 items referring to their own anticipated willingness to work for their group (adapted from Haslam, Eggins, & Reynolds, 2003). Participants indicated how willing they would be to engage in each of 13 behaviours on a 7-point Likert scale from (1) "not at all" to (7) "very much". For example, "How willing would you be to attend voluntary work meetings?" and "In your daily work, how willing would you be to do more than is formally required?" ($\alpha = .92$).

Results

Manipulation Checks

Only a significant main effect of identity was found on the shared identity manipulation check, F(1, 80) = 87.55, p < .01, $\eta_{P}^2 = .52$. Perceived shared identity was higher in shared identity conditions (M = 5.90, SD = 0.96) than in non-shared identity conditions (M = 3.57, SD = 1.28). Analysis of the surveillance manipulation

check revealed only a main effect of surveillance, F(1, 78) = 98.31, p < .01, $\eta_{p^2} = .56$. The perceived level of surveillance was higher for those in high surveillance conditions (M = 6.01, SD = 0.63) than those in low surveillance conditions (M = 3.71, SD = 1.34). Both manipulations were thus successful.

Leader Perceptions

Analysis of variance revealed a significant main effect of shared identity on leader perceptions, F(1, 75) = 41.33, p < .01, $\eta_{p^2} = .36$. The leader was more likely to be seen as a group member when identity was shared (M = 4.33, SD = 1.23) than when it was not shared (M = 3.03, SD = 0.87). There was also a significant main effect of level of surveillance on leader perceptions, F(1, 75) = 20.62, p < .01, $\eta_{p^2} = .25$. Leaders were more likely to be seen as group members when surveillance was low (M = 4.13, SD = 1.24) than when it was high (M = 3.22, SD = 1.09). However, these two main effects were qualified by a significant identity by level of surveillance

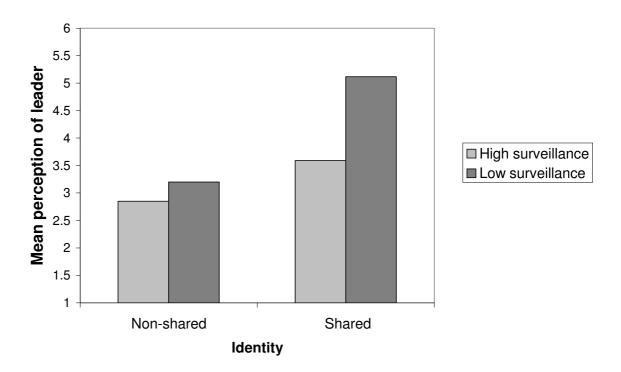


Figure 3.2 Mean perception of leader perceptions, as a function of type of identity and level of surveillance

interaction, F(1, 75) = 8.10, p < .01, $\eta_{p^2} = .10$ (see Figure 3.2 above). As predicted, and replicating Study 3.1 findings, simple main effects analyses showed that when identity was shared, leaders were more likely to be perceived as group members in the low surveillance condition (M = 5.12, SD = 0.73) than in the high surveillance condition (M = 3.59, SD = 1.15), F(1, 75) = 26.93, p < .01. However, when identity was not shared there was no effect for surveillance, F(1, 75) = 1.45, p = .23, $\eta_{p^2} = .02$.

Infringement on Privacy

Analysis of variance showed that there was a significant main effect of surveillance on perceptions of privacy infringement, F(1, 75) = 44.36, p < .01, $\eta_p^2 = .37$. Those in the high surveillance condition (M = 5.15, SD = 1.01) perceived greater privacy infringement than those in the low surveillance condition (M = 3.59, SD = 1.12). This main effect was qualified by a significant interaction of identity and

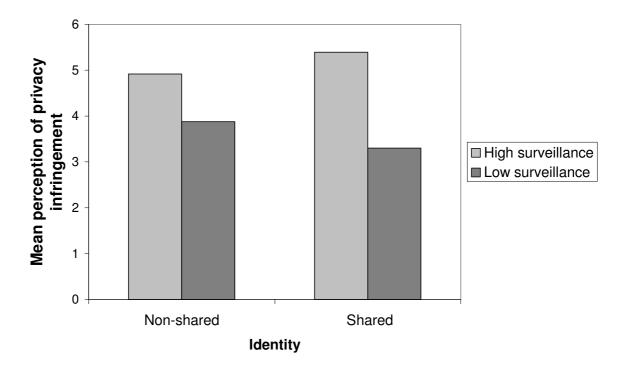


Figure 3.3 Mean perception of privacy infringement, as a function of type of identity and level of surveillance

surveillance, F(1, 75) = 4.99, p = .03, $\eta_P^2 = .06$ (see Figure 3.3). In line with predictions, simple main effects analyses revealed that when identity was shared, those in the high surveillance condition (M = 5.39, SD = 0.90) perceived CCTV as invading their privacy significantly more than those in the low surveillance condition (M = 3.30, SD = 1.04), F(1, 75) = 39.05, p < .01, $\eta_P^2 = .34$. Likewise, a smaller effect was found that when identity was not shared, those in the high surveillance condition considered surveillance to invade their privacy significantly more (M = 4.92, SD = 1.08) than those in the low surveillance condition (M = 3.88, SD = 1.14), F(1, 75) = 9.92, p < .01, $\eta_P^2 = .12$.

Willingness to Work for the Group

Analysis of variance confirmed that there was a significant main effect of identity on levels of willingness to work for the group, F (1, 76) = 23.83, p < .01, η_{P}^2 = .24. Willingness was higher when identity was shared (M = 4.62, SD = 1.03) than when it was not shared (M = 3.69, SD = 0.88). In addition, it was found that there was a significant main effect of surveillance on willingness to work for the group, F (1, 76) = 12.87, p < .01, η_{P}^2 = .15. Willingness to work for the group was higher when surveillance was low (M = 4.49, SD = 0.97) than when it was high (M = 3.82, SD = 1.05). These main effects were qualified by a significant interaction of shared identity and surveillance on willingness to work for the group, F (1, 76) = 3.89, p = .05, η_{P}^2 = .05 (see Figure 3.4, overleaf). Simple main effects analyses revealed that when identity was shared, willingness to work for the group was higher in the low surveillance condition than in the high surveillance condition (M = 4.09, SD = 1.04), F (1, 76) = 15.08, p < .01. However, when identity was not shared, there was no effect for surveillance, F (1, 76) = 1.34, p = .25, η_{P}^2 = .02. Furthermore, simple main

effects showed that when surveillance was low, willingness to work for the group was higher for those in the shared identity condition (M = 5.18, SD = 0.67) than those in the non-shared identity condition (M = 3.83, SD = 0.73), F(1, 76) = 22.92, p < .01.

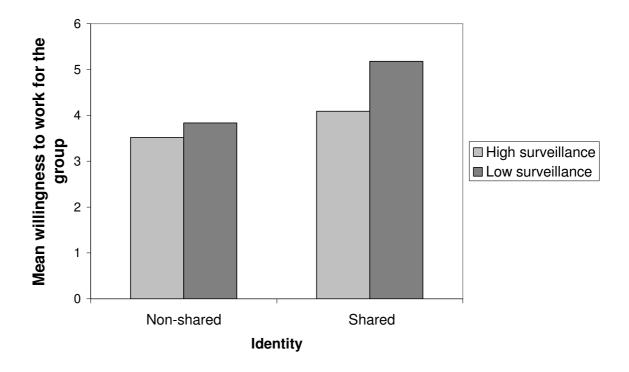
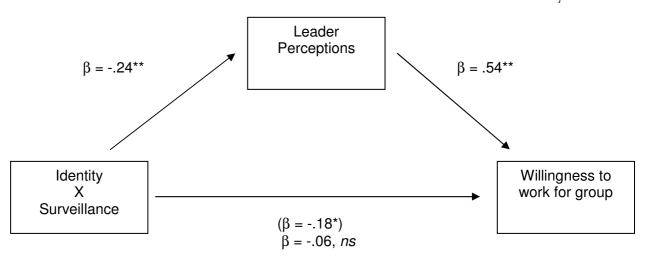


Figure 3.4 Mean level of willingness to work for the group, as a function of type of identity and level of surveillance

Mediational Analyses

A series of regression analyses were conducted to examine whether leader perceptions would mediate the interactive effect of identity and level of surveillance on willingness to work for the group. In line with guidelines for conducting mediated moderation (see Aiken & West, 1991; Baron & Kenny, 1986; Muller, Judd, & Yzerbyt, 2005), identity and surveillance were dummy coded, and the interaction term was calculated by multiplying the two variables. As recommended by Muller and colleagues, the independent variables were contrast coded as non-shared identity (-1), shared identity (+1); low surveillance (-1), high surveillance (+1), and the mediator (leader perceptions) was centred. The analyses showed that the

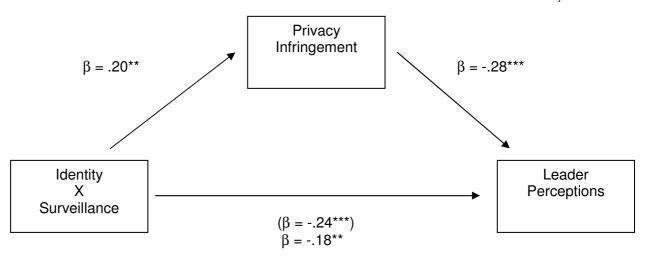


Note: ** p < .01; * p = .05

Figure 3.5 Path diagram illustrating that leader perceptions mediate the effect of identity and surveillance on levels of willingness to work for the group

requirements for demonstrating mediated moderation were met. In the first stage of analysis, regression analyses with the independent variables, identity and surveillance, and the interaction term confirmed the significant interaction between identity and surveillance on willingness to work for the group, $\beta = -.18$, p = .05. Secondly, the significant interaction between identity and surveillance on leader perceptions was confirmed, $\beta = -.24$, p < .01. A third analysis was conducted where leader perceptions was entered with the independent variables, and with willingness to work for the group as the criterion. This analysis revealed that leader perceptions predicted willingness to work for the group, $\beta = .54$, p < .01, and the interaction was reduced to non-significance, $\beta = -.06$, p = .48, ns (see Figure 3.5; Sobel test - Z = 2.43, p = .02).

Furthermore, we tested the prediction that perceptions of privacy infringement would mediate the effect of identity and surveillance on ratings of leader perceptions. The independent variables were coded as before and their interaction term calculated, while the mediator privacy infringement was centred.



Note: *** p < .01; ** p = .03; * p = .05

Figure 3.6 Path diagram illustrating that the effect of identity and surveillance on leader perceptions is partially mediated by perceptions of privacy infringement

The analyses showed the moderation was partially mediated. Two separate regression analyses with the independent variables identity, surveillance and the interaction term confirmed the significant interaction between identity and surveillance on the mediator, perceptions of privacy infringement, $\beta = .20$, p = .03, and the outcome, leader perceptions, $\beta = -.24$, p < .01. In the second stage of analysis, privacy infringement was added in the analysis predicting leader perceptions, and we found that perceptions of privacy infringement negatively predicted leader perceptions, $\beta = -.28$, p < .01, and that the interaction became less significant, $\beta = -.18$, p = .03 (see Figure 3.6, above). This decrease was marginally significant according to the Sobel test (Z = -1.74, p = .08).

⁶ Please note that according to the guidelines from Muller and colleagues (2005), mediated moderation may be demonstrated either by the moderator affecting the treatment effect on the mediator, or by the moderator affecting the mediator's effect on the outcome, or both. Here, in both our analyses, we have demonstrated the first type of mediated moderation (see second stage of analysis; note that this is only partial in the case of the second set of analyses). For both sets of analyses, we tested the second type of mediated moderation both ways – with each IV tested as the moderator – and found no significant interaction between moderator and mediator on the outcome variable.

Discussion

The results from Study 3.2 replicate those of Study 3.1. Leaders were most likely to be seen as part of the team when participants perceived that identity was shared and when surveillance was low. The combination of high surveillance and shared identity undermined these positive leader perceptions brought about by shared identity: perceptions of leaders as team members were more in line with when identity was not shared (providing evidence in line with RQ 5).

Study 3.2 extends Study 3.1 by shedding light on the processes underlying this effect and identifying possible behavioural implications. The finding that perceptions of privacy infringement were higher when identity was shared and surveillance was high, and that these perceptions mediated the effects on leader perceptions, suggests that surveillance in the context of shared identity led to more negative attributions about the use of surveillance (this provides additional support related to RQ 4). In addition, this undermining effect of surveillance in the context of shared identity was extended to willingness to work for the group, with participants' level of willingness being lowest when surveillance was high and identity was shared (RQ 6). Mediational analyses confirmed that perceptions of leaders as team members mediated the effect of identity and surveillance on willingness to work for the group.

Thus, Study 3.2 demonstrates that high levels of surveillance not only undermine an established shared sense of identity, but also have potential implications for organisational behaviour. The fact that this undermining effect of high surveillance in the context of shared identity occurs because high surveillance is seen as an invasion of privacy suggests that such high surveillance is perceived as inappropriate in this setting, and thus sends the signal that the leader may not perceive the identity as being shared (Reicher & Hopkins, 2003; Turner, 1991;

Turner et al., 1989). The fact that effects were found both on perceptions of the leader as part of the group and on willingness to help the group suggests that perceptions of the initial shared identity may have been damaged. It is the mixed message of sharing identity but having a leader who does not behave in line with this, that appears to dilute the basis of identity.

General Discussion

In line with previous research on social identity and the capacity for social influence (e.g. Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; Platow et al., 2005), we predicted that surveillance from a source that the individual identifies with may be perceived as more acceptable, and have a more beneficial effect on his or her behaviour, than if the surveillance appeared to come from someone the individual does not share identity with. This was indeed shown to be the case in both Studies 3.1 and 3.2 – when identity with the leader was shared, individuals perceived leaders more as team members than when identity was not shared. In Study 3.2, we found those with a shared identity were also more willing to work on behalf of the group than those with a non-shared identity.

However, this research set out to demonstrate that there is a limit to the extent to which a shared sense of social identity can be the basis for condoning surveillance. The assumptions underlying shared in-group membership may mean that if surveillance is imposed where it is not needed, it can undermine this shared sense of identity (Reicher & Hopkins, 2003). We expected this to occur because surveillance in the context of shared identity is unnecessary and may even be perceived to be inappropriate and privacy infringing. We argue that when identity is shared, high surveillance thus changes the relationship with the leader as followers had understood it: leaders who originally had 'power through' their followers imply

that they do not see themselves as sharing identity with their followers when using high surveillance – creating an impression of 'power over'. In the face of these changing intra-group dynamics, group members therefore change their attitudes and behaviour accordingly.

In Study 3.1, we demonstrated that the beneficial effects of shared social identity (as compared to non-shared) on perceptions of the leader were only apparent when surveillance was low. When surveillance was high, the potential benefit of perceiving a shared sense of identity with the leader was lost, and indeed perceptions of the leader as a team member dropped to levels comparable to those of leaders without a shared identity. It appeared that, in support of hypotheses related to Research Question 5, the shared identity that was originally invoked was undermined by the high level of surveillance that was implemented.

These findings were replicated in Study 3.2. In addition, we demonstrated that the undermining effect of surveillance generalised to willingness to work for the group, a good measure of social influence as the leader need not engage in any overt attempt to change behaviour (i.e., evidence related to RQ 6). As in previous research (e.g., van Dick, Grojean, Christ, & Wieseke, 2006), we found that where a shared sense of identity was invoked, people were far more willing to go beyond formal requirements to benefit the group, but again, this was only when there were low levels of surveillance. At high levels of surveillance and when identity was shared, levels of willingness to work for the group were tempered and did not differ from when identity was not shared. This effect on willingness to work for the group was fully mediated by leader perceptions. This emphasises the fact that, rather paradoxically, followers are most likely to go the extra mile when the context is one

where their behaviour is not monitored. What is important is that the leader is "one of us" and does not feel the need to closely monitor followers' behaviour.

Finally, Study 3.2 also demonstrated that this undermining effect of high surveillance on identity could be partially explained by perceptions that surveillance was invading people's privacy. This reinforces our argument that, in this case, imposing high surveillance is likely to be seen as contextually inappropriate, as the leader is supposed to be a fellow in-group member but is now imposing surveillance that is unnecessary. This, in turn, causes followers to redefine their relationship with the leader and they are more likely to interpret surveillance as an infringement of privacy, despite the fact that it is in-group members who impose the surveillance. This is important to demonstrate not just because of the theoretical implications for social identity accounts of the compensatory effects of shared identity, but also because of the practical repercussions for leaders in real organisations.

Implications and Future Research

The present research offers an important advance on the extant literature examining perceptions of surveillance. Much of the previous literature has tended to focus upon the effectiveness of surveillance (Armitage, 2002; Sewell, 1998; Spitzmuller & Stanton, 2006; Welsh & Farrington, 2003), has assumed surveillance is an invasion of privacy (Alge et al., 2006; D'Urso, 2005, 2006; Karat et al., 2005), or has reported unexplained disparate views of surveillance (e.g., Dixon et al., 2003). However, this research has typically not examined why this should be the case (Botan & Vorvoreanu, 2005; Honess & Charman, 1992; Short & Ditton, 1998) or has investigated isolated factors affecting views of surveillance, without implementing any unified theoretical perspective (e.g., Friedman, Kahn, Hagman, Severson, & Gill, 2006; Persson & Hansson, 2003).

Here, we have investigated the unintended effects of surveillance, and have also attempted to elaborate on the process by which surveillance comes to be seen in a favourable or unfavourable light. Applying social identity principles, the results of our analyses indicate that it is those who do not need to be under surveillance, due to a sense of shared identity, who experience the negative side effects that can be associated with high levels of surveillance. The implications of this finding is that using a high level of surveillance where it is not needed sends out a contradictory message to group members. Such actions may undermine perceptions of the person imposing the surveillance, even though he or she was previously seen as a group member, and also undermines positive behaviours in which followers would otherwise have engaged. Indeed, we argue that leaders who choose to impose high surveillance when they already had the capacity for influence misunderstand the group dynamic. Future research could expand on our analysis and investigate how surveillance impacts on other outcomes associated with shared social identity, such as trust in, fairness of, and loyalty to the leader. Indeed, issues related to trust and interpretation of the leader's intentions are examined later in this thesis, in Chapters 5 and 6.

The studies presented here provide evidence of the undermining effect of using high surveillance when identity is supposed to be shared, and has shown that this effect does not occur when there was no sense of shared identity in the first place. However, it is also clear that the levels of surveillance were quite high in both studies. Despite the fact that even the high surveillance conditions were not unrealistic, future research should examine whether the undermining effect of high surveillance is replicated using less extreme surveillance conditions. In a similar vein, it remains to be demonstrated whether more covert forms of surveillance would

lead to the same attributions about the purpose of surveillance, and the same outcomes.

Another avenue for future research involves examining in closer detail attributions about the extent to which the leader is perceived as responsible for the level of surveillance. In the current research, we found that leadership perceptions were negatively affected even though the leader was not explicitly responsible for the high level of surveillance (see in particular Study 3.2). This suggests that a leader may have difficulty building a shared identity with followers in a context where surveillance is pervasive, regardless of whether or not he or she is responsible for the surveillance. In the next study of this thesis, we manipulate surveillance which comes directly from the leader, to see if the same effects are obtained (see Chapter 4).

Finally, even though the scenario methodology that we used in our research added experimental control and ethical appropriateness, it would be useful to examine the role of surveillance in contexts where participants themselves experience surveillance. Such studies would help to understand the generalisability of our findings to other situations and other surveillance contexts. In Chapter 4, we present a behavioural study, where participants actively experience surveillance themselves.

Conclusions

In this research, we qualified the assumption that surveillance affects people in a homogeneous and rigid way (Honess & Charman, 1992; Lee & Brand, 2005; Whitty & Carr, 2006). We demonstrated the conditions that affect when surveillance will be perceived as unacceptable, when it will produce negative evaluations of those who are watching, when it will lead to a reduction in group-benefiting behaviours,

and when it will not (see also Levine, 2000). This research advances extant research into social influence by supporting the idea that identity-based influence does have its limits (Reicher & Hopkins, 2003). If a leader goes against what is seen to be beneficial for the group, it is possible that they will cease to be influential over other group members, and to be regarded in a similar manner to someone with whom identity is not shared (related to RQs 5 & 6; see also RQ 4).

The research provides empirical evidence for recent accounts of social power (Simon & Oakes, 2006; Turner, 2005). Going beyond the theoretical suggestions made by these authors, we have shown that there are certain conditions that seem to define each of the power processes they outline. If some of the defining characteristics of one process ('power over') are imposed where the other process ('power through') was originally in place, it is possible to distort the group dynamic such that people perceive the situation to be 'power over' rather than 'power through' and behave accordingly. In such situations, the boundaries of shared social identity, of influence based on that identity, and of a power process based on this kind of influence, have all been breached, leaving 'power over' as the only possibility.

In a practical sense, then, the implication of the present research is that those who have the capacity for genuine influence but decide to impose a high level of surveillance have misunderstood the very group process that gave them their power in the first place. By sending out contradictory messages to their followers, the intrinsic influence of such leaders is likely to end up being undermined, and they will have to resort to a coercive type of power that could otherwise have been avoided. In that sense, we not only agree with Foucault (1977) that "the perfection of power should tend to render its actual exercise unnecessary" but also that if leaders do

exert their power in such situations, they run the risk of undermining the very basis of 'perfect power'.

CHAPTER 4

THE HIDDEN COSTS OF SURVEILLANCE ON PERFORMANCE AND HELPING BEHAVIOUR⁷

"The same technology that threatens the autonomy of the individual seems destined to frustrate attempts to reestablish community and shared responsibility because it destroys the essential components of trust and accountability." – Oscar H. Gandy, *The Panoptic Sort: A Political Economy of Personal Information* (1993, p. 3)

As highlighted in the previous chapter, for those in positions of power there are at least two strategies that can be utilised to influence others do what the power-holder wants. Those in power can appeal to a sense of *esprit de corps* and emphasise the importance of common goals, or alternatively, they can use their power to force others to act as they wish and use surveillance to ensure compliance. In line with previous theorising, we term these 'power through' people and 'power over' people, respectively (Simon & Oakes, 2006; Turner, 2005). Both strategies can be effective. In the former case, there is considerable evidence that, in an organisational setting, the more power-holders and employees share a sense of identity, the more employees are willing to work on behalf of the group (van Dick, Grojean, Christ, & Wieseke, 2006). A shared sense of identity may also increase general productivity (Reynolds & Platow, 2003). In support of the second strategy, surveillance has also been found to improve productivity (Botan & Vorvoreanu, 2005).

In particular the strategy to improve productivity through surveillance seems to be popular – at least, more popular than thinking of ways to improve productivity

⁷ This chapter is an adapted version of O'Donnell, Ryan, & Jetten (2009).

through shared identity building. For example, a quick internet search reveals a wealth of surveillance equipment and methods that employers can use to monitor employees, ranging from software that monitors computer use (Amplusnet, 2008; Free Press Release, 2008), to CCTV and phone recording (Eidolon, 2008; Spy Arsenal, 2008).

However, even though the two power strategies outlined above achieve very similar organisational outcomes and have both been found to enhance performance, the psychological processes involved are very different (Simon & Oakes, 2006; Turner, 2005). That is, when identity is shared, as in the first strategy, positive performance effects result from increased motivation and trust. This, in turn, facilitates communication and makes social influence possible (Chapter 2 of this thesis, O'Donnell, Jetten, & Ryan, 2010; see also Haslam, Powell, & Turner, 2000; Hornsey, Oppes, & Svensson, 2002; Tajfel & Turner, 1979; Tanis & Postmes, 2005; Turner, 1991, Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). As noted above, prior research suggests that productivity itself may be increased by a sense of shared identity (Reynolds & Platow, 2003; Shapiro, Furst, Spreitzer, & von Glinow, 2002). However, in the present research, we are more interested in shared identity with regard to extra-role behaviours. Indeed, previous research has shown that when those in power emphasise their shared identity with their followers, willingness to work on behalf of the group increases (Haslam et al., 2000; van Dick et al., 2006). We predict that under these conditions – where help directly benefits one's own group – followers are most likely to display helping behaviour.

Surveillance, on the other hand, increases performance because those who are being watched fear for "Big Brother". That is, they work hard because they fear the retributions of those in power. This is related to the second strategy. However,

as surveillance relies on coercion and accountability (Reicher & Levine, 1994; Reynolds & Platow, 2003), increased productivity may come with hidden costs. We propose two particular costs that are likely to emerge. First, even though productivity may go up, quality may go down because the work is motivated by the avoidance of punishment, not because people identify with the goals of those in power (Stanton & Julian, 2002; Whitty, 2004). Secondly, and perhaps more important in the long-term, surveillance can damage the culture of an organisation (Alder, 2001), because it has adverse effects on employee morale and absenteeism (Botan & Vorvoreanu, 2005; Oz, Glass, & Behling, 1999) and the likelihood of offering extra help to others (Dixon, Levine, & McAuley, 2003). For example, as demonstrated in Chapter 3 (O'Donnell, Jetten, & Ryan, in press), when surveillance was high, as opposed to low, intentions to work on behalf of the group reduced significantly, and this was particularly the case when initial identity was shared with the leader, rather than non-shared. In this way, although surveillance may increase productivity, it may fail to ensure that people engage in both high quality work and offer extra, discretionary help.

Thus, these two strategies to motivate others – emphasising shared social identity and goals to ensure 'power through', or using surveillance to have 'power over' – appear to work in opposite ways. This difference in process becomes particularly apparent when examining these strategies in combination. We argue that high surveillance may undermine the positive performance outcomes of shared identity. When identity is shared, but the power-holder uses surveillance, workers may start to question whether the power-holder shares the perceived sense of identity (see Chapter 3; O'Donnell et al., in press). Indeed, surveillance, by its very nature, suggests that those in power feel they have to watch over others because

they lack the faith that others are on their side (see also Reynolds & Platow, 2003). Therefore, we predict that introducing surveillance when it is not needed (because identity is shared) may do more harm than good, and performance may be negatively affected (related to RQ 6).

The Present Research

There has been little examination of whether the use of high surveillance results in high levels of good-quality work. Previous work has also not examined how surveillance impacts on behaviours made possible by a shared sense of identity, such as helping. The current research therefore sets out to extend the findings of Chapter 3 by demonstrating that the use of surveillance may have positive effects on productivity, but also that there are hidden costs associated with using such a strategy — in particular when it is used in a context where surveillance is not necessary (i.e., shared identity).

The study presented in this chapter consisted of a performance task, and an opportunity to 'go the extra mile'. We tested three predictions. First, high surveillance should lead to significantly higher productivity than low surveillance. Secondly, however, higher productivity should be associated with lower quality work. Third, we expected that identity and surveillance would interact when predicting helping behaviour (related to RQ 6). Specifically, compared to non-shared identity, shared identity should increase helping, but this greater willingness to go the extra mile should be undermined when surveillance was high, leading to low willingness to help in this condition. Conversely, participants should be most willing to help when identity was shared and surveillance was low, because under these conditions the person being helped is an in-group member rather than an out-

group member, and they are not using an unnecessarily high level of surveillance against their fellow group members.

Method

Design

The study consisted of a 2 (Identity: Shared vs. Non-shared) X 2 (Surveillance: Low vs. High) between-participants design. Both factors were manipulated as detailed below, and participants were randomly assigned to conditions.

Participants

Ninety-eight undergraduate psychology students voluntarily took part in return for course credit. Participants were aged from 18 to 45 with a mean age of 20 (four individuals did not indicate their age). There were 11 males and 85 females (two individuals did not indicate their gender).

Procedure

Participants came to the lab in small groups (ranging from one to eight, with a mean group size of five) and were informed that the study involved taking part in a simple production task, making as many paper aeroplanes as possible in five minutes. The main emphasis of the task was therefore high productivity. The instructions for the experiment included the identity and surveillance manipulations.

Manipulation of shared versus non-shared identity. Participants were made aware of their identity as undergraduate students and the experimenter's identity as a postgraduate student. They were then told the experiment aimed to compare the performance of either (a) students and academic staff (such that participants and the experimenter shared the identity of student; shared identity condition) or (b) undergraduates and postgraduates (non-shared identity condition). The task of

comparison was the paper aeroplane task, and all participants were given instructions for making an aeroplane and shown a demonstration before the task began.

Manipulation of low versus high surveillance. Prior to the production task, participants were informed either that the experimenter would leave the room while they completed the task, coming to check on them halfway through (low surveillance condition), or that she would walk around during the task and might watch them work, and that their work would be recorded on video camera. The experimenter then pressed a button connected to a small camera on a tripod, causing it to make a conspicuous noise and rotate towards participants (high surveillance condition).

Dependent Measures

Productivity. The measure of productivity was the number of paper aeroplanes made in five minutes. The aeroplane had a total of seven folds, so if participants had partially completed planes with four or more folds (but less than seven), they were coded as half an aeroplane.

Quality. Three raters who were blind to conditions coded aeroplanes for quality on a 5-point scale, from (1) "very poor" to (5) "perfect". Following recommendations from Shrout and Fleiss (1979), the intraclass correlation between the three raters' scores was calculated and found to be satisfactory (ICC = .70). Quality scores were therefore averaged across the three raters.

Surveillance manipulation check. Following completion of the productivity task, participants were given a short questionnaire (demographic information was also gathered here). The surveillance manipulation was checked with the items: "During the aeroplane task, I felt under surveillance," "During the aeroplane task, I felt

constantly monitored," "I felt able to do the aeroplane task as I saw fit" (reversed), and "During the aeroplane task, I felt someone was looking over my shoulder" (α = .77).

Task enjoyment. In order to determine that helping behaviour (measured last) was not simply related to how much participants enjoyed the experiment, two items measured to what extent participants enjoyed taking part in the paper aeroplane task. These items were "I thought the paper aeroplane task was fun" and "I felt pretty comfortable taking part in this task" (r = .45, p < .01).

Helping behaviour. Following completion of the questionnaire, participants were thanked and told the experiment was over. As a way of measuring helping behaviour, the experimenter then asked them for a favour. She explained that she was having difficulty recruiting enough participants, and while they were not under any obligation, they could write down the names of friends who might want to participate if they so wished. Forms were handed out for this purpose then the experimenter stood with her back to participants, so they were under no overt pressure to write down any names. The number of friend recommendations was taken as a measure of helping.

Following this, participants were thanked again and told the true nature of this final task, and therefore asked to leave the participant suggestion forms with their other materials. They were reassured that their friends would not be contacted and (for those in the high surveillance condition) that they had not been filmed.

Results

Preliminary Analyses

Preliminary analyses revealed that the number of participants in the experimental session was a significant covariate when analysing the effects of

identity and surveillance on measures of productivity and helping behaviour. We therefore controlled for session size in these analyses.

Surveillance Manipulation Check

The effectiveness of the surveillance manipulation was checked using ANOVA. This revealed only a main effect of surveillance, F(1, 94) = 51.64, p < .01, $\eta_{p^2} = .36$. As predicted, perceived level of surveillance was significantly higher in the high surveillance condition (M = 3.92, SD = 1.06) than in the low surveillance condition (M = 2.40, SD = 1.01).

Productivity

A 2(Identity) X 2(Surveillance) analysis of covariance (with session size) was conducted to determine the effects of identity and surveillance on task productivity. The analysis revealed that the covariate was significant, F(1, 93) = 8.52, p < .01, $\eta_{P}^2 = .08$ (with increasing number of participants in the session, productivity decreased). In addition, only the predicted main effect for surveillance was significant, F(1, 93)

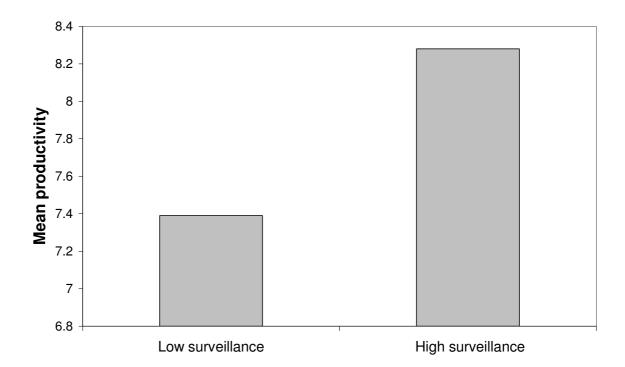


Figure 4.1 Mean productivity (number of aeroplanes) as a function of surveillance condition

= 6.05, p = .02, $\eta_{\rm p}^2$ = .06 (see Figure 4.1, previous page). Participants made significantly more aeroplanes when surveillance was high (M = 8.28, SD = 2.86) than when it was low (M = 7.39, SD = 2.43).

A 2(Identity) X 2(Surveillance) analysis of variance revealed no significant main effects or interaction on quality (all ps > .05). However, a regression analysis demonstrated that increased productivity led to a decrease in quality, $\beta = -.23$, t = -2.27, p = .03.

Task Enjoyment

Quality

Analysis of variance showed no differences in task enjoyment caused by identity or surveillance (all ps > .4). Furthermore, the level of task enjoyment was not correlated with participants' level of helping behaviour (r = -.01, p = .91). Helping Behaviour

A 2(Identity) X 2(Surveillance) analysis of covariance (with session size) on helping behaviour revealed that the covariate was significant, F(1, 89) = 5.08, p = 0.03, $\eta_p^2 = 0.05$ (with increasing number of participant in the session, levels of helping increased). There was a significant main effect of surveillance, F(1, 89) = 14.63, p < 0.01, $\eta_p^2 = 0.01$. Participants offered greater levels of help when surveillance was low (M = 4.11, SD = 2.79) as opposed to high (M = 2.35, SD = 2.44). Also in line with predictions, there was a significant interaction of identity and surveillance on levels of help, F(1, 89) = 4.85, p = 0.03, $\eta_p^2 = 0.05$ (see Figure 4.2 overleaf). Simple main effects showed that when identity was shared, participants displayed greater levels of help when surveillance was low (M = 5.00, SD = 2.94) rather than high (M = 1.92, SD = 2.18), F(1, 89) = 19.43, p < 0.01, $\eta_p^2 = 0.18$. In contrast, when identity was not

shared, there was no difference as a function of surveillance, F(1, 89) = 1.32, p = .26, $\eta_{\rm p}^2 = .02$, ns. Also in line with predictions, when surveillance was low, participants showed higher levels of helping when identity was shared (M = 5.00, SD = 2.94) as compared to not shared (M = 3.18, SD = 2.34), F(1, 89) = 5.26, p = .02, $\eta_{\rm p}^2 = .06$. Conversely, there were no significant effects of identity when surveillance was high, F(1, 89) = 0.67, p = .42, $\eta_{\rm p}^2 = .13$, ns.

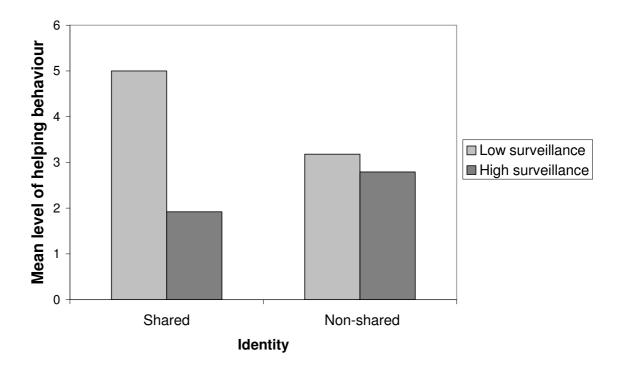


Figure 4.2 Mean level of helping behaviour as a function of type of identity and level of surveillance

Discussion

In the present study, we found evidence that surveillance leads to increased productivity. Participants made more aeroplanes, on average, when they were under high rather than low surveillance. However, and also in line with predictions, making more aeroplanes directly predicted lower quality of aeroplanes. Therefore, when productivity increased, the quality of work fell. This is perhaps the most obvious cost of high surveillance. This finding is in line with literature suggesting

that surveillance can have detrimental effects on outcomes such as workplace morale, workplace identity, and employee behaviour (Botan & Vorvoreanu, 2005; Oz et al., 1999; Reynolds & Platow, 2003). We suggest that although participants felt obliged to work hard, this obligation did not extend to how *well* they worked — increased productivity came at the cost of poor quality. This fits with prior research from Oz and colleagues which suggests surveillance may imply to employees that a particular goal (i.e., productivity or quantity of work) is more important than others goals (i.e., quality of work). It should be noted that shared identity was not expected to have any beneficial effect on quality, as the objective of the task was high productivity.

A second, perhaps more hidden cost of high surveillance, was observed when examining the extent to which participants were willing to go the extra mile by offering to help on a task that was outside the realm of surveillance. Participants were most willing to help the experimenter when identity was shared and surveillance was low. Where identity was shared but high surveillance was imposed, willingness to help the experimenter fell to the level observed when identity was not shared. This supports our previous scenario-based findings from Chapter 3 (O'Donnell et al., in press) and provides behavioural evidence that using high levels of surveillance can undermine the intrinsic positive effects of shared identity (in line with RQ 6).

Implications and Conclusions

The implications of the present research are important for theory into social identity, surveillance, productivity, and helping behaviour. This research demonstrates the limits of shared identity. If high surveillance is introduced where a shared understanding of identity is implied, the quality of people's contributions, in

terms of both attention to detail in required work and level of discretionary helping behaviour, may be reduced. This is theoretically important because it illuminates our understanding of the differential impact of surveillance on intended and unintended outcomes. Furthermore, in particular, helping behaviour can be seen as grounded in shared social identity and demonstrates true social influence (Dixon et al., 2003; van Dick et al., 2006). The findings therefore suggest, in line with Research Questions 5 and 6, and our Chapter 3 findings (O'Donnell et al., in press), that when high surveillance is imposed, the social influence inherent in a sense of shared identity seems to be lost. Consequently, if we are lucky enough to enjoy a sense of *esprit de corps* with those around us, we would be unwise to start checking that they are doing as we would like – for the hidden costs of playing Big Brother may vastly outweigh the apparent benefits.

CHAPTER 5

SMILE, YOU'RE ON CCTV!

HOW PERCEPTIONS OF SURVEILLANCE ARE AFFECTED BY THE FRAMING OF TARGET AND PURPOSE

"... the public doesn't mind surveillance in relation to *criminality*, but it does mind surveillance of people who *might* be acting in a 'bad' way but not to the extent of criminality. Context is all, as you might expect." – UK Liberty blog (2009)⁸

As noted in the introductory chapter of this thesis, public opinion about the utility of surveillance such as CCTV is exceedingly varied. Indeed, a few minutes perusing letters to the editor, blogs, and commentary in response to online articles about surveillance will lead one to quickly conclude that opinion on this topic is clearly divided. Reactions range from full support for surveillance to an outright rejection of its use. The question that arises is: what determines whether people will support surveillance or not? It seems that one's assessment of whether or not to support the use of surveillance is dependent on a range of factors, including how effective it is, whether it is beneficial, who has imposed it, and what purpose it aims to serve. As captured in the quotation above, and as implied in our earlier studies, if one does not believe that surveillance is being imposed for the purpose of protection, the natural and perhaps only alternative is that it is being used for more underhand means. Assuming that the majority of people are generally law-abiding, a pertinent question to ask is "Does surveillance target those few criminal people that

⁸ Comment written in response to an article in the Local Government Chronicle (2009) implying surveillance is widely supported.

spoil things for the rest, or does it target everyone, including myself and other lawabiding people?"

While there is only a limited amount of research on factors which affect perceptions of surveillance, there is some exploration of (a) the effectiveness of surveillance, (b) the importance of the source, and (c) notions of target and purpose. At this point, we should note that the reason we speak of both target and purpose together is that we believe it is possible to alter the perceived purpose of surveillance by manipulating who it is targeting. For example, as noted in Chapter 1 of this thesis, surveillance in a shop might target either the staff or the customers, and the assumed purpose for the surveillance is implied by the tactic chosen.

Given that the notion of target and purpose is very closely related to both the effectiveness and source of surveillance, we can develop predictions about the importance of target and purpose from examining the related literature on effectiveness and source, in addition to prior evidence about purpose itself. We argue that in previous research about the effectiveness or source of surveillance, participants were able to use the information provided to infer the purpose. Most likely, the observed effects are therefore partly due to attributions about who surveillance is targeting, and what the purpose of it is.

There is already a certain amount of evidence regarding how the target and purpose of surveillance underlie the impact of surveillance effectiveness on surveillance appraisals. Fischhoff, Slovic, Lichtenstein, Read, and Combs (1978) argued that attitudes towards surveillance are dependent on the perceived advantages and disadvantages, and that people arrive at their evaluation of surveillance via a cost-benefit analysis. That is, people may tolerate some privacy invasion (i.e., cost) if surveillance is effective in preventing crime (i.e., benefit).

Similarly, more recently, Sanquist, Mahy, and Morris (2008) demonstrated that surveillance is seen as more acceptable the more effective it is perceived to be. Effectiveness was also inversely related to perceptions of invasiveness, such that people saw surveillance as less invasive when it was more effective. Although this research focuses on the impact of effectiveness on attitudes to surveillance, it implies that to the extent that people see surveillance as serving a legitimate purpose they will find it more acceptable.

Previous research into the source of surveillance can also shed some light on the likely impact of perceived purpose. As noted by Levine (2000), reactions to surveillance are far more dependent on who the source of surveillance is, than on whether or not one is under surveillance per se. Indeed, the research reported in Chapters 2 and 3 demonstrate that the assumption that surveillance is being used to protect the in-group is instrumental in it being viewed positively (see RQs 4 & 5). More specifically, in Studies 2.1 and 2.2, appraisals that the purpose of surveillance was for safety mediated the effect of shared group identification on reduced perceptions of privacy infringement. Moreover, in Studies 3.1, 3.2, and 4, highly elevated levels of surveillance damaged the perception that it was being used solely for group members' benefit. Here we saw that where identity was shared but surveillance was high, the benefits usually associated with shared identity were undermined (Chapter 3, O'Donnell, Jetten, & Ryan, in press; Chapter 4, O'Donnell, Ryan, & Jetten, 2009). Therefore, given that the inferred purpose of surveillance seemed to underlie the importance of source in determining how surveillance was viewed, we have good reason to believe that information about the purpose and the target of surveillance should impact strongly on how it is evaluated.

In addition to this indirect evidence, some literature has already identified the relevance of knowing the target or purpose of surveillance in informing our attitudes towards it. For example, qualitative research has revealed that concerns about privacy infringement resulting from workplace surveillance tended to be related to the anticipated purpose of the surveillance (e.g., Stanton & Weiss, 2000; Ullmann-Margalit, 2008). In support of this evidence, several studies have also found that surveillance was seen as more acceptable if it had a legitimate and transparent purpose; that is, if it was clearly monitoring work-relevant behaviour, or if participants had an input into the process and could see what it was being used for (Alge, 2001; Dinev, Hart, & Mullen, 2008; Persson & Hansson, 2003). With regard to the issue of who surveillance is targeting, Friedman, Kahn, Hagman, Severson, and Gill (2006) found that some participants were less concerned about the use of surveillance when it did not target them – although this only held true for male participants.

Thus, there is some evidence that people use information about target and purpose when forming their attitudes towards surveillance. However, the work that has already emerged lacks a comprehensive theoretical perspective. Furthermore, there is yet to be an empirical demonstration of the direct relationship between the perceived target or purpose of surveillance and attitudes about surveillance acceptability. In the three studies presented in this current chapter, we systematically investigate the framing of surveillance by varying the target (and hence the purpose) of surveillance, and measure the impact of this framing on how surveillance is viewed, including measures of perceived invasiveness, surveillance acceptability, and emotional response (addressing RQ 7).

In the studies reported in Chapters 2 and 3, participants appeared to use information about the source of surveillance or the level of surveillance to infer its purpose, and this in turn affected their perceptions. Thus, it seems that, in the context of these experiments, participants used the limited information given to them in the study to inform their understanding of the purpose of surveillance. However, in the real world, specific information about the purpose of surveillance and who is targeted is often overtly provided in the form of warning signs or published directives. Indeed, according to the CCTV Code of Practice produced by the Data Protection Commissioner (France, 2000), the use of surveillance systems should be made known so that people are aware that they are entering an area that is under surveillance. Additionally, the sign should identify who is responsible for the surveillance and how to contact them, plus the purpose of the surveillance.

However, according to research carried out by McCahill and Norris (2002), only 53% of surveillance systems in London were advertised with a sign, and only 22% of those signs actually complied with the guidelines. We must therefore assume that in the remaining 78% of systems with signs, information about the source and purpose of surveillance is missing or incomplete. Given that the public perception of surveillance seems to depend on knowledge about source and purpose, it seems pertinent to investigate precisely how differential framing of the target and purpose of surveillance affects how it is viewed – particularly as the impact of source has now been thoroughly investigated in our previous studies.

Framing for Inclusion vs. Exclusion

In his discussion of Foucault's work, Gandy (1993) points to the dividing nature of surveillance – it can be used to isolate people into classes or categories,

and identify them for further scrutiny. Cole (2004) further develops this idea in relation to the actual signs that are used to make the public aware of surveillance. Having surveyed the signs used to inform the public about the presence of CCTV cameras, he describes five categories of signs: statements of fact, permeation, statements of inclusion, statements of exclusion, and double-coded statements. Statements of fact simply announce the fact that CCTV is in operation; for example, "Closed circuit television in use here". Permeation refers to messages that have been absorbed into the existing environment. Instead of a typical CCTV warning sign, messages might be painted on a wall, and therefore seem to blend with the broader surroundings, reducing their visibility. Statements of inclusion are messages worded towards the general public, including them in the idea that surveillance serves the public good. An example might be, "CCTV is in use to help keep prices low". In contrast, statements of exclusion are defined as addressing only those who are not acting in the interests of the public good, for example, "WARNING! CCTV in operation". Finally, double-coded statements combine statements of inclusion with statements of exclusion, so as to reassure law-abiding citizens, and also warn criminals they are being monitored. An example might be, "You are not alone... you are on camera!".

Framing and Social Identity

In light of our focus on the way surveillance can categorise people into 'us' versus 'them', we confine ourselves in the present analysis to examining statements of inclusion and exclusion. However, we define these slightly differently to Cole. For the purposes of the present research, we define statements of inclusion and exclusion on the basis of group memberships. In our research, statements of inclusion include one's in-group within the targeted group, whereas statements of

exclusion clearly target an out-group, thereby excluding one's own group from being targeted by surveillance. In this way, one is included (or excluded) not as an individual, but by being a member (or not) of the group that is targeted. The notion of using such framing to categorise people as either targeted by surveillance, or not, fits with the social identity approach we take in this research, and particularly with self-categorisation theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

From this perspective, we argue that surveillance which is framed as either targeting an out-group for the protection of one's in-group, or as targeting one's ingroup itself, should result in very different perceptions of both the surveillance and the imposers of surveillance. There are a number of reasons why this might be the case. First, the framing of the surveillance indicates that a certain categorisation has taken place: one is either included within the target of the surveillance, or one is not. Importantly, this categorisation gives additional meaning about the relationship between the source of surveillance and the target. If a person discovers they are included within the group that is targeted by surveillance, this implies they are not trusted, and moreover, that they are not considered a part of the group that is imposing the surveillance. Conversely if the person discovers that surveillance is being employed to monitor an out-group, for the protection of their own group, the implication is more likely to be that they can trust and identify with the source of surveillance. In this way, the framing of surveillance not only implies a certain categorisation, but also defines a particular inter-group relationship between those being watched and those who are watching.

In the studies reported in this chapter, we are interested in how information about target and purpose impacts on notions of shared identity and, in turn, on perceptions of surveillance. If, as we found previously (Studies 2.1 & 2.2;

O'Donnell, Jetten, & Ryan, 2010), shared identity leads one to assume surveillance is being used to protect the in-group, does it follow that surveillance which has the purpose of protecting the in-group therefore comes from a source that can be trusted and identified with? Based on Cole's concepts of inclusion and exclusion, and the research reported in Chapters 2, 3, and 4, we argue that when surveillance targets another group for the purpose of protecting one's own group it should be viewed more positively than when one is included within its target.

The Present Research

Three studies were conducted to investigate the impact of the framing of surveillance on perceptions of the surveillance itself and of those who implement it. We tested our predictions in three different environments that commonly feature surveillance systems: an airport (Study 5.1), a city centre (Study 5.2), and a nightclub (Study 5.3). Specifically, in each of these environments we manipulated whether or not the surveillance targeted the participants' in-group, and measured variables such as the extent to which participants perceived surveillance to invade their privacy, how acceptable and necessary they thought surveillance to be, and the degree to which they trusted and identified with the source of surveillance. We predict that when surveillance targets the participant and their group, it will be viewed as more privacy infringing and less acceptable and necessary, than when it is targeting an out-group for the in-group's protection (in line with RQ 7, relating to how purpose and target impact on perceptions of surveillance). Additionally, when surveillance targets the participant and their group, trust in, and identification with, the implementers of surveillance should be lower than when surveillance targets another group for the in-group's safety (relating to RQ 8, which focuses on the impact of purpose and target on evaluations of the source of surveillance).

Study 5.1 examined the way in which the framing of surveillance impacts on perceptions of surveillance in the context of airport security. Based on evidence that suggests we are likely to evaluate surveillance by means of a cost-benefit analysis (Fischhoff et al., 1978; Sanquist et al., 2008), given the current security climate, one might expect that airport surveillance would garner such high levels of support that there would be little detectable variation in opinion. Indeed, in order to promote confidence in the safety of international travel, airport security has been considerably increased after the September 11 terrorist attacks of 2001 (Chen & Noriega, 2003; Curry, 2004; Lyon, 2007b; Wilson & Weber, 2008). According to the Home Office website (2009), the threat level in the UK at the time this research was carried out was 'severe', which meant that a terrorist attack was "highly likely". Similarly the United States Homeland Security website (2009) stated that their threat level with regard to travel was 'high'. We would argue that in such threatening times, support for surveillance would be expected to be quite high. Furthermore, there is unlikely to be much ambiguity about the target and purpose for the surveillance. From an experimenter's point of view, however, the question that arises relates to how one manipulates the purpose of surveillance when there is considerable consensus on who is being targeted and whether or not this is a good thing.

One way to get around this is to look at airport surveillance in a different *context*. Although it is likely that there would be universally high levels of support for departure security, which is obviously in place to prevent terrorist attacks on board aircraft; there are fewer reasons to have high security for arriving passengers. That is, there is much less of an immediate threat of terrorism from passengers entering a country (not least because they will already have endured extensive security checks

upon leaving their previous location). Essentially, then, we are attempting to remove the highly salient issue of terror threat from the setting of airport surveillance, so as to stop people from being overly positive in their reactions to surveillance. In the situation of arrivals security, then, it is possible to manipulate the target and therefore the purpose of surveillance.

In this study, we used British participants and made use of the out-group 'immigrants' (specifically illegal immigrants). By making a comparison between 'us' (British) and 'them' (immigrants), we manipulated the framing of surveillance: that is, the target and therefore the purpose of surveillance. Specifically, we manipulated whether surveillance targeted the out-group (illegal immigrants) for the benefit of the in-group, or included the in-group (Britons) within its target. We measured perceived privacy invasion, as in our earlier studies, and included a measure of the acceptability of surveillance. To help gain an insight into underlying processes, we also included some measures of negative emotional reactions to being under surveillance and measures of British identification. We predicted that when the surveillance was framed as including Britons within its target, participants would consider it to be more of an invasion of privacy and less acceptable than when surveillance specifically targeted illegal immigrants. We also predicted participants would feel more negative emotions related to surveillance under these conditions. Furthermore, based on our previous finding that identification leads to the assumption that surveillance is being used to protect the in-group, we anticipated that manipulating the target and purpose of surveillance would in turn affect identification, by implying that the source of surveillance either can or cannot be trusted and identified with. We therefore predicted that when surveillance targeted

British people, identification with Britain would be significantly lower than when surveillance targeted illegal immigrants.

Finally, we predicted several mediation effects. We anticipated that the direct effect of the framing of surveillance on level of privacy infringement would be mediated by both feelings of negativity towards the surveillance, and identification with Britain. This was because we expected that framing surveillance as targeting the in-group would make people feel more negative about it, and also that the source imposing the surveillance was not someone they could identify with, and that both of these factors would lead to the surveillance being seen as more invasive. In turn, privacy infringement would mediate the effects of framing on acceptability of surveillance, because surveillance which seems to invade privacy is likely to be seen as less acceptable than when it is seen as less invasive.

Method

Design

The experiment took a simple two groups design with the factor 'Framing of Surveillance', where surveillance was framed either as targeting all, including the ingroup (Target Includes Self) or as targeting an out-group specifically (Target Excludes Self). The factor was manipulated as detailed below and participants were randomly assigned to conditions.

Participants

Participants were an opportunity sample of 40 British people, aged from 18 to 63 with a mean age of 33 (one person did not indicate their age). There were 18 males and 22 females. They took part voluntarily.

The study was presented as an investigation into people's views and feelings about new security and surveillance measures which we said were to be introduced in Heathrow Airport. Participants were approached in public places and asked to take part. If interested, they read a manipulation describing new surveillance measures that were supposedly going to be put in place, and an explanation of the reason for the new measures, which formed the framing manipulation, as detailed below.

Manipulation of framing of surveillance. All participants were told that Heathrow Airport was planning to introduce new surveillance measures to passport control areas such as finger printing, taking photographs, and increased CCTV. In the target includes self condition, participants were then told that the measures were being implemented as the airport needed to more thoroughly screen all passengers before they entered Britain, to enable more intense and reliable checks to be made on them. In the target excludes self condition, participants were told that the airport needed to more thoroughly screen vertain passengers before they entered Britain, due to a serious problem with illegal immigration, to reduce the number of illegal immigrants entering Britain.

Dependent Measures

Following the manipulation, participants were asked to complete a questionnaire containing the dependent variables. Unless otherwise specified, participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Privacy infringement. Five items, adapted from Alge, Ballinger, Tangirala, and Oakley (2006) and those used in Chapter 2 (O'Donnell, Jetten, & Ryan, 2010) were

used to determine the extent to which participants felt the new surveillance measures would be an infringement on their privacy. The items were, "The use of these new surveillance measures would be an invasion of my privacy", "I would feel comfortable if the new surveillance measures were introduced in airports" (reversed), "The fact that new surveillance equipment could be introduced makes me feel uneasy", "If these new measures were put in place, I would feel like someone was always watching me", and "I would be concerned about my privacy in airports if the new surveillance was in use" ($\alpha = .89$).

Acceptability of surveillance. Four items were used to assess how acceptable participants thought the new surveillance measures would be. These items were as follows: "It would be acceptable to introduce these new surveillance measures in UK airports", "I do not understand why anyone would want these surveillance measures to be introduced" (reversed), "The introduction of these new surveillance measures would be unfair" (reversed), and "I think it would be justified if new surveillance equipment were introduced" ($\alpha = .87$).

Negative emotions towards surveillance. Participants rated the extent to which the new surveillance measures would make them feel each of the following emotions: "distrusted", "self-conscious", "guilty", and "anxious". Participants rated each of the emotions on a 7-point Likert scale, from (1) "not at all" to (7) "extremely". Exploratory factor analysis revealed that these emotions loaded on one factor, and they were found to form a reliable scale ($\alpha = .84$).

Identification. The four item scale of Doosje, Ellemers, and Spears (1995) was adapted to measure British identification. The items used were, "I see myself as British", "I am pleased to be British", "I feel strong ties with other British people" and "I identify with other British people" ($\alpha = .82$). Please note that prior to this,

participants had the opportunity to tick one or more boxes to indicate their national identity, with the options "British", "English", "Welsh", "Scottish" and Northern Irish". This was used so that participants' subgroup identities were still being acknowledged when they were asked how much they identified as being British, as previous research has suggested that participants may otherwise be unwilling to identify at the superordinate level (Haslam, Eggins, & Reynolds, 2003).

Following completion of the questionnaire, participants were thanked for their time, given the debriefing sheet, and were offered a sweet or chocolate as compensation for taking part.

Results

Privacy Infringement

Analysis of variance showed that there was a significant effect of framing of surveillance on levels of privacy infringement, F(1, 38) = 5.70, p = .02, $\eta_{P}^2 = .13$. Participants perceived that their privacy was significantly more invaded when the

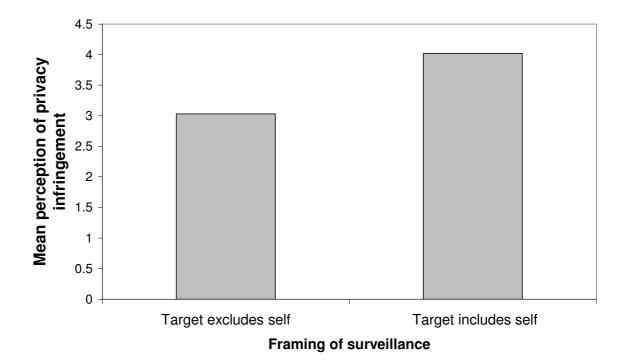


Figure 5.1 Mean perception of privacy infringement as a function of the framing of surveillance

target of surveillance included them (M = 4.02, SD = 1.53), as opposed to targeting the out-group (M = 3.03, SD = 1.04). See Figure 5.1 above.

Acceptability of Surveillance

Analysis of variance demonstrated that framing of surveillance had a significant effect upon how acceptable surveillance was seen to be, F(1, 38) = 6.47, p = .02, $\eta_{\rm p}{}^2 = .15$. Surveillance was seen as more acceptable when it was framed as targeting the out- group (M = 5.61, SD = 0.77), rather than including participants' own group (M = 4.74, SD = 1.33); see Figure 5.2 below.

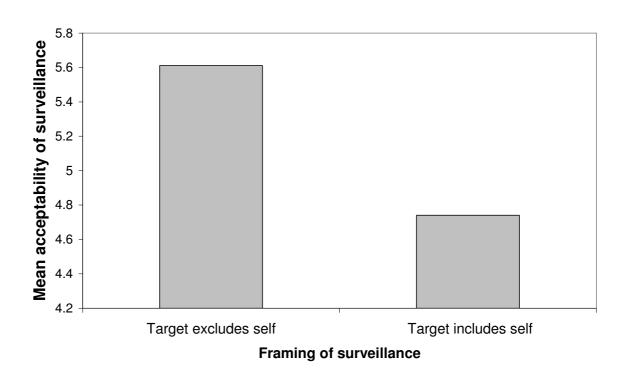


Figure 5.2 Mean level of acceptability of surveillance as a function of the framing of surveillance

Negative Emotions towards Surveillance

Analysis of variance showed that there was a significant effect of framing of surveillance on negative emotions towards surveillance, F(1, 38) = 14.24, p < .01, $\eta_{p^2} = .27$. Specifically, participants envisaged experiencing more negative emotions

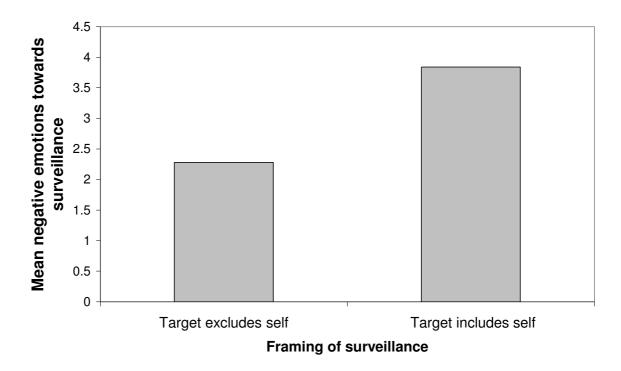


Figure 5.3 Mean level of negative emotion towards surveillance as a function of the framing of surveillance

when surveillance was framed as including their group in its target (M = 3.84, SD = 1.53), as opposed to targeting the out-group (M = 2.28, SD = 1.05). See Figure 5.3 above.

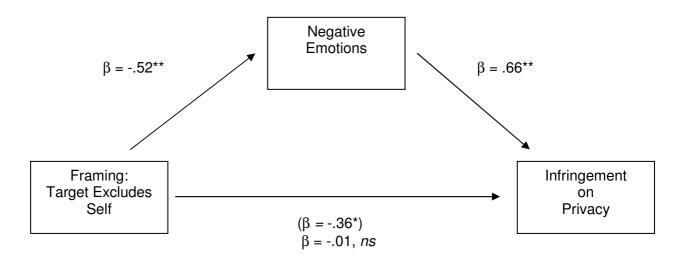
Identification

Analysis of variance revealed that there was no significant effect of framing of surveillance on level of British identification, F(1, 38) = 0.63, p = .43, $\eta_{P}^2 = .02$, ns.

Mediational Analyses

Following recommendations from Baron and Kenny (1986), a series of regression analyses were conducted to examine whether negative emotions towards surveillance would mediate the effect of framing of surveillance on privacy infringement. The independent variable, framing of surveillance, was coded as follows: targets includes self (1), targets excludes self (2). Regression analysis

confirmed that framing of surveillance significantly predicted levels of privacy infringement, $\beta = -.36$, p = .02. As the previous analysis had shown, framing of surveillance was also a significant predictor of the mediator, negative emotions, $\beta = -.52$, p < .01. Finally, when framing of surveillance and negative emotions were both entered as predictors of privacy infringement, negative emotions significantly predicted privacy infringement, $\beta = .66$, p < .01, and the effect of framing of surveillance on privacy infringement was reduced to non-significance, $\beta = -.01$, p = .92, ns. A Sobel test confirmed that the mediator was significant (Z = 3.00, p < .01). See Figure 5.4.



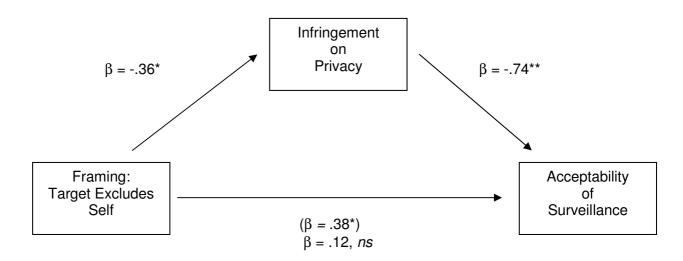
Note: ** p < .01; * p = .02

Figure 5.4 Path diagram illustrating that negative emotion towards surveillance mediates the effect of the framing of surveillance on perceptions of privacy infringement

Furthermore, we tested the prediction that perceptions of privacy infringement would mediate the effect of framing of surveillance on ratings of the acceptability of surveillance. The independent variable was coded as before.

Regression analysis confirmed that framing of surveillance was a significant

predictor of the acceptability of surveillance, β = .38, p = .02. In addition, it significantly predicted the mediator, privacy infringement, β = -.36, p = .02. In the final analysis, framing of surveillance and privacy infringement were both entered as predictors, with acceptability of surveillance as the criterion. This demonstrated that privacy infringement significantly predicted acceptability of surveillance, β = -.74, p < .01, and the effect of framing of surveillance became non-significant, β = .12, p = .30, ns (Sobel test: Z = -2.12, p = .03). See Figure 5.5, below.



Note: ** p < .01; * p = .02

Figure 5.5 Path diagram illustrating that perceptions of privacy infringement mediates the effect of the framing of surveillance on acceptability of surveillance

Discussion

In line with predictions, we found that surveillance was seen as more of an invasion of privacy when it was framed as including participants' in-group in its target, rather than when it specifically targeted an out-group. Correspondingly it was also seen as more acceptable when the out-group was targeted, and led to less negative feeling about surveillance. Further analysis revealed that this negative

emotional reaction to being under surveillance drove the effect of framing of surveillance on perceptions of privacy invasion.

In addition, perceived privacy infringement accounted for the effect of the framing of surveillance manipulation on the degree to which surveillance was viewed as acceptable. These results provide evidence in line with Research Question 7, and build upon research which identifies the relationship between privacy invasion and lower acceptability of surveillance (e.g., Sanquist et al., 2008), by investigating the factors that determine how invasive surveillance is seen to be and why. The results also build upon qualitative and survey research suggesting that a more favourable purpose for surveillance leads to it being viewed as less invasive (e.g., Alge, 2001; Dinev et al., 2008; Persson & Hansson, 2003; Stanton & Weiss, 2000; Ullmann-Margalit, 2008), and experimental research showing that targeting others rather than the self may impact positively upon views of invasiveness (Friedman et al., 2006).

Finally, the results complement our earlier findings, by elaborating how people use information about the target and purpose of surveillance in forming their own feelings and reactions to it. Previously, we have shown that people seem to infer information about the purpose of surveillance from other available information – for example, from the source of surveillance (Chapter 2, O'Donnell et al., 2010) or from the level of surveillance (Chapter 3, O'Donnell et al., in press). Study 5.1 builds upon these findings by showing directly how the public use information provided about the target and purpose of surveillance in developing their own opinions about it.

Not all predictions were supported, however. We found no support for our hypotheses regarding identification (RQ 8); the framing of surveillance did not

affect how participants felt about their group. It is possible that the identity in question corresponded to a group that was too broad for us to detect any effects, meaning it may simply lack the variation necessary to detect the changes we expected. For this reason, and to replicate the existing findings in another context, we conducted a follow-up study.

Study 5.2

Study 5.2 had a very similar design to that of Study 5.1, but it investigated the effects of the framing of surveillance in the context of closed circuit television (CCTV) in a city centre setting. As highlighted in Chapter 1, public CCTV cameras are extremely prevalent in the UK, with an estimated four million cameras currently in operation (BBC News, 2009). Reactions to public surveillance are rather mixed, with Ditton (2000) noting that in contradiction to the widely-held view that 90% of us are in favour of CCTV (e.g., Honess & Charman, 1992), 33% of his sample 'minded' being monitored by CCTV in the street. This is a sizeable proportion, and indicates a lack of consensus about CCTV in public places. A large survey carried out by Dixon, Levine, and McAuley (2003) demonstrated that 59% of people believe they have a right to know whether they are entering a surveilled area, and a similar proportion (58%) felt that CCTV could be "used and abused by the wrong people" (p. 17). As noted in the general introduction to this chapter, CCTV systems are required by law to be advertised by signs identifying the implementer of the surveillance, and the purpose for its use (France, 2000), but this is frequently not adhered to (McCahill & Norris, 2002).

Study 5.1 demonstrated that attitudes towards surveillance varied depending on who it targeted and therefore what purpose it appeared to serve, providing evidence in line with Research Question 7. In this next study, we attempt to

replicate this finding in a different setting. In addition, we specifically investigated the impact of CCTV warning signs and how they are worded on how people interpret and evaluate surveillance. In contrast to Study 5.1, this study also more specifically manipulated whether surveillance was targeting the *self* or targeting *others*, rather than targeting all people (including the self), versus targeting an out-group.

In this study, we recruited Exeter residents who had lived in the city for at least one year. In addition to measuring privacy infringement, acceptability of surveillance, and identification with Exeter, we added some extra measures: necessity of surveillance, perceived purpose of surveillance, and the level of trust in the authorities who had placed the cameras. These variables were all selected for their anticipated ability to elaborate on the processes by which the framing of surveillance leads to systematic differences in how it is perceived. In line with Study 5.1, and other previous research (e.g., Friedman et al., 2006), we expected that when surveillance was framed as targeting the self, it would be perceived significantly more as privacy invasion than when it was framed as targeting others (for participants' and their in-group's protection). In addition, we predicted that under the former circumstances, surveillance would be viewed as less acceptable and necessary, and as protecting one's safety less. With regard to the implementers of surveillance, it was predicted that when surveillance was framed as targeting the self rather than others, city identification would be significantly lower, as would trust in the authorities that implemented the surveillance. Finally, we predicted that identification with Exeter and the degree to which participants trusted the authorities would mediate the direct effect of the framing of surveillance on its perceived purpose as protecting safety; and furthermore that this perception of the

purpose as safety would mediate the effect of framing on levels of privacy infringement and the acceptability and necessity of surveillance.

Method

Design

The experiment took a simple two groups design with the factor 'Framing of Surveillance' (Targets Self vs. Targets Others). The factor was manipulated, and participants were randomly assigned to conditions.

Participants

An opportunity sample of 39 Exeter residents took part in this study. They were aged from 18 to 81 with a mean age of 31. There were 17 males and 22 females, and participation was voluntary.

Procedure

The study was presented as an investigation of people's views and feelings about the use of CCTV surveillance in Exeter City Centre. Upon agreeing to participate, participants read a short paragraph and viewed an image of a CCTV warning sign, which formed the framing manipulation, as detailed below.

Manipulation of framing of surveillance. All participants were reminded that there is CCTV in use in Exeter City Centre and were told that surveillance was relatively high. In the surveillance targets self condition, they were also told that the average person is caught on camera 200 times per day and that film is held for up to three months. They then saw an image of a CCTV warning sign that said, "You're on Film! CCTV Cameras in 24 Hour use." They were asked to imagine they had seen this sign on Exeter's high street. In the surveillance targets others condition, the paragraph emphasised the benefits of CCTV in reducing crime, and participants viewed a sign which read, "CCTV in operation for your personal safety and

security". Again, they were asked to imaging they saw this sign in Exeter's high street and to bear it in mind throughout the questionnaire.

Dependent Measures

Following the manipulation, participants completed the questionnaire which contained the dependent variables. Participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Privacy infringement. In order to determine the degree to which participants felt the CCTV in Exeter was an infringement on their privacy, the same five items as in Study 5.1 were used ($\alpha = .88$).

Acceptability of surveillance. The same four items as were used in Study 5.1 assessed how acceptable participants thought the CCTV in Exeter City Centre was $(\alpha = .76)$.

Necessity of surveillance. Six items measured the extent to which participants felt CCTV was necessary in Exeter City Centre. These items were, "The use of CCTV cameras is essential for the smooth running of the city of Exeter", "In order to protect my own and other's safety, the use of CCTV cameras is vital", "The CCTV cameras in Exeter city centre do not help in any way" (reversed), "It would be unwise not to use CCTV in Exeter city centre", "The use of CCTV is a basic need in cities such as Exeter" and "This level of CCTV surveillance is not required in Exeter city centre" (reversed), ($\alpha = .83$).

Appraisal of the purpose of surveillance. Three items, taken from a longer scale used in Chapter 2 (O'Donnell et al., 2010) were used to assess to what extent participants thought the purpose of CCTV cameras was to ensure safety.

Participants rated the degree to which they felt each of the following reasons was

the purpose of the cameras: "For my safety", "For the safety of others" and "Because of previous incidents", ($\alpha = .83$).

Identification. Two items were used to measure identification with Exeter, taken from Chapter 2 (O'Donnell et al., 2010) although originally adapted from Doosje and colleagues (1995). The items used were, "I feel a strong sense of belonging to the city of Exeter" and "I feel strong ties with other people from Exeter" (r = .47, p < .01).

Trust in the authorities' intentions. Participants completed a single item measuring to what degree they trusted the authorities who had implemented the surveillance cameras. This item was, "I trust that the authorities have Exeter people's best interests at heart with regard to the CCTV in use".

Following completion of the questionnaire, participants were thanked for their time, given the debriefing sheet, and were offered a sweet or chocolate as compensation for taking part.

Results

Preliminary Analyses

Five participants emerged as consistent outliers in the analyses, and were therefore excluded. They were not included in any of the analyses reported below. Privacy Infringement

Analysis of variance revealed that there was an effect of framing of surveillance on levels of privacy infringement which approached significance, F (1, 32) = 3.06, p = .09, η_{P}^2 = .09. This effect was in the anticipated direction, with participants perceiving that their privacy was more invaded when surveillance was targeting the self (M = 2.85, SD = 1.30) rather than targeting others (M = 2.20, SD = 0.69).

Acceptability of Surveillance

Analysis of variance demonstrated that the framing of surveillance had a marginally significant effect on acceptability of surveillance, F(1, 32) = 3.60, p = .067, $\eta_{\rm P}{}^2 = .10$. Surveillance was seen as marginally more acceptable when it was framed as targeting others (M = 6.33, SD = 0.48), as opposed to targeting the self (M = 5.82, SD = 0.96); see Figure 5.6.

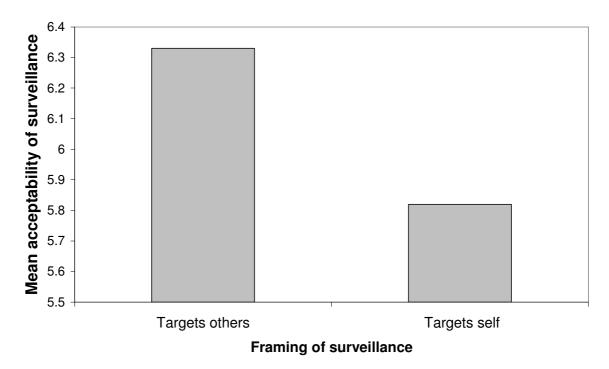


Figure 5.6 Mean level of acceptability of surveillance as a function of the framing of surveillance

Necessity of Surveillance

Analysis of variance showed that there was a significant effect of framing of surveillance on how necessary surveillance was perceived to be, F(1, 32) = 4.55, p = .04, $\eta_{P}^2 = .12$. Specifically, participants thought surveillance was more necessary when it was framed as targeting others (M = 5.58, SD = 0.75), as opposed to targeting the self (M = 4.82, SD = 1.19). See Figure 5.7, overleaf.

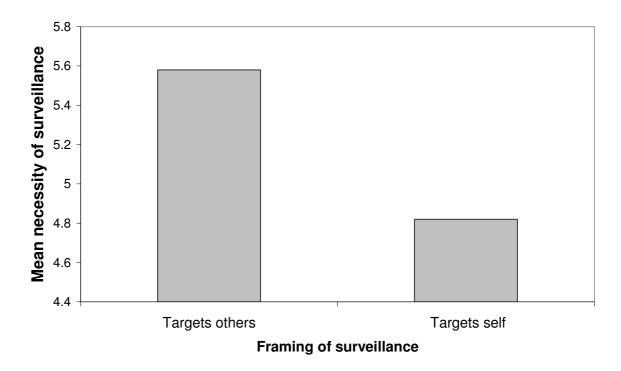


Figure 5.7 Mean level of necessity of surveillance as a function of the framing of surveillance

Appraisal of the Purpose of Surveillance

Analysis of variance indicated that the framing of surveillance had a marginally significant effect on appraisals of the purpose of surveillance, F(1, 32) = 3.94, p = .056, $\eta_{\rm p}{}^2 = .11$. Participants were more likely to perceive that the purpose of surveillance was for safety when it was framed as targeting others (M = 5.96, SD = 0.42), rather than the self (M = 5.40, SD = 1.01).

Identification

Analysis of variance showed that there was no significant effect of framing of surveillance on identification with Exeter, F(1, 32) = 0.004, p = .95, $\eta_{P}^2 < .01$, ns.

Trust in Authorities

Analysis of variance showed that there was a significant effect of the framing of surveillance on how much participants trusted the authorities, F(1, 32) = 10.50, p < .01, $\eta_{p^2} = .25$. In particular, participants were significantly more likely to trust the

authorities when surveillance was framed as targeting others (M = 6.20, SD = 0.77), as opposed to the self (M = 4.63, SD = 1.74). See Figure 5.8 below.

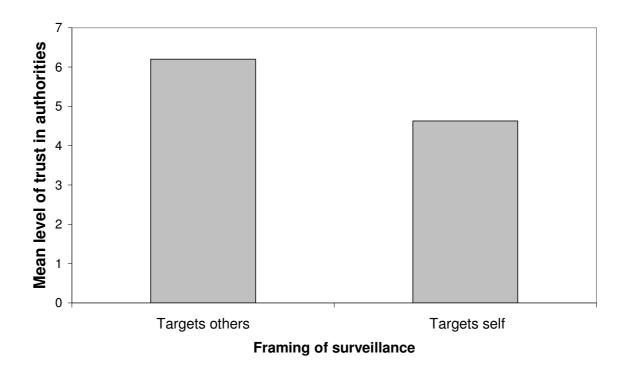
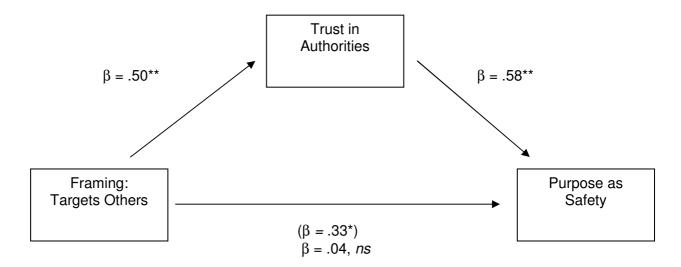


Figure 5.8 Mean level of trust in authorities as a function of the framing of surveillance

Mediational Analyses

In line with recommendations from Baron and Kenny (1986), a series of regression analyses were conducted to investigate whether trust in the authorities would mediate the effect of framing of surveillance on appraisals of the purpose of surveillance. The independent variable, framing of surveillance, was coded as follows: surveillance targets self (1), surveillance targets others (2). Regression analysis revealed that the framing of surveillance marginally predicted appraisals of the purpose of surveillance, $\beta = .33$, p = .056. Framing of surveillance also significantly predicted the mediator, trust in authorities, $\beta = .50$, p < .01. Finally, when the framing of surveillance and trust in authorities were both entered as predictors with appraisals of purpose as the criterion, trust in authorities

significantly predicted appraisals of the purpose of surveillance, β = .58, p < .01, and the effect of framing of surveillance was reduced to non-significance, β = .04, p = .80, ns. A Sobel test confirmed that the mediator was significant (Z = -2.39, p = .02). See Figure 5.9.



Note: ** p < .01; * p = .056

Figure 5.9 Path diagram illustrating that trust in authorities mediates the effect of the framing of surveillance on appraisals of the purpose of surveillance as safety

In addition to the analyses reported above, we ran three separate sets of analyses to test the prediction that appraisals of surveillance as ensuring safety would mediate the effects of framing of surveillance on privacy infringement, acceptability, and necessity of surveillance. In all cases, the independent variable was coded as described above. First, regression analysis confirmed the marginally significant effect of framing of surveillance on privacy infringement, $\beta = -.30$, p = .09, and on the mediator, appraisal of the purpose of surveillance as safety, $\beta = .33$, p = .056. When framing of surveillance and appraisal of purpose were both entered to predict privacy infringement, it was found that appraisal of the purpose of

surveillance marginally predicted privacy infringement, $\beta = -.31$, p = .056, and the effect of framing became less significant, $\beta = -.19$, p = .27. However, this reduction was not significant according to the Sobel test (Z = 1.33, p = .18). See Figure 5.10 below.

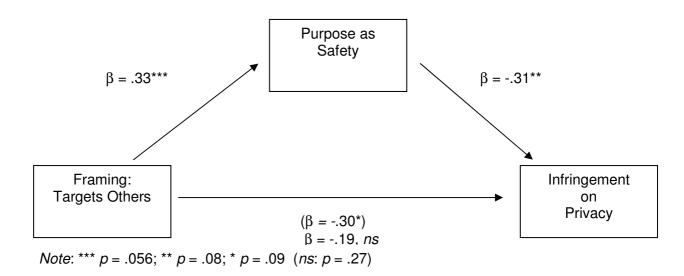
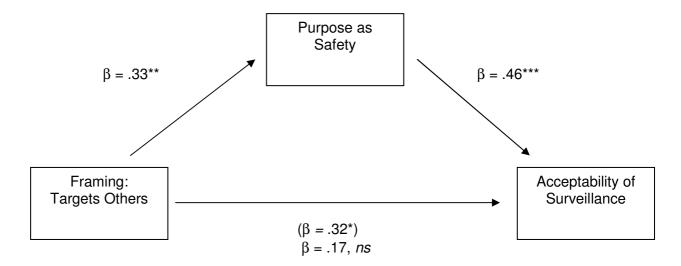


Figure 5.10 Path diagram testing the hypothesis that appraisals of purpose as safety would mediate the effect of the framing of surveillance on infringement of privacy

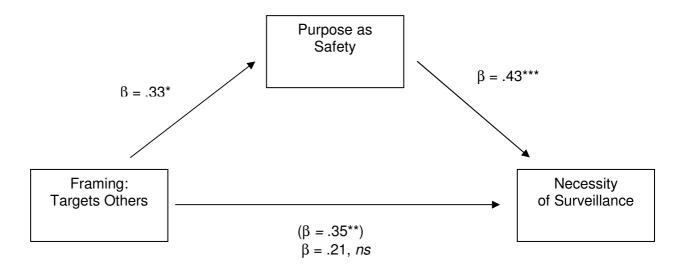
The second set of analyses concerned the acceptability of surveillance. There was a marginally significant effect of framing of surveillance on acceptability of surveillance, $\beta = .32$, p = .067. There was also a marginally significant effect on the mediator, appraisals of the purpose of surveillance as safety, $\beta = .33$, p = .056. Finally, when framing of surveillance and appraisals of purpose were both allowed to predict acceptability of surveillance, appraisals of purpose as safety significantly predicted acceptability, $\beta = .46$, p < .01, and the effect of framing became non-significant, $\beta = .17$, p = .31. However, the reduction did not reach significance according to the Sobel test, Z = -1.64, p = .10. See Figure 5.11 below.



Note: *** p < .01; ** p = .056; * p = .067 (ns: p = .31)

Figure 5.11 Path diagram testing the hypothesis that appraisals of the purpose of surveillance as safety would mediate the effect of the framing of surveillance on acceptability of surveillance

The final set of analyses was concerned with the necessity of surveillance. Regression analysis confirmed the significant effect of framing of surveillance on necessity of surveillance, $\beta = .35$, p = .04. There was also a marginally significant effect of framing on the mediator, appraisals of purpose as safety, $\beta = .33$, p = .056. Finally, when both framing of surveillance and appraisals of purpose were entered as predictors, appraisals of the purpose of surveillance significantly predicted necessity of surveillance, $\beta = .43$, p < .01, and framing of surveillance became non-significant, $\beta = .21$, p = .20. However, the Sobel test revealed that the mediator was not significant, Z = -1.64, p = .10. See Figure 5.12 (overleaf).



Note: *** p = .01; ** p = .04; * p = .056

Figure 5.12 Path diagram testing the hypothesis that appraisals of the purpose of surveillance as safety would mediate the effect of the framing of surveillance on necessity of surveillance

Discussion

The results partially supported predictions. In line with our hypotheses, there was some evidence that framing surveillance as targeting the self led to perceptions of greater privacy infringement than surveillance targeting others. However, this effect was only marginally significant. In keeping with this finding, though, we showed that when surveillance was framed as targeting the self, surveillance was seen as less acceptable and less necessary than when it was framed as targeting others (although the former finding was again only marginal). There was another marginal effect for the purpose of surveillance: when surveillance was framed as targeting the self, it led to a reduced perception that its purpose was to protect, as compared to when it was framed as targeting others. With regard to the implementers of surveillance, participants placed significantly more trust in them when the surveillance was framed as targeting others rather than targeting the self.

Despite the failure to reach traditional significance levels on several variables, this study offers valuable evidence in support of our hypotheses, specifically those relating to Research Question 7. The picture the results present is largely congruent, and they replicate and build upon the findings of Study 5.1. Given that marginally significant effects were still obtained with a rather subtle manipulation (i.e., one image of a CCTV warning sign), this suggests these messages are quite powerful. Nevertheless, in future research, it would probably be advisable to strengthen the manipulation by extending the paragraph of accompanying material, in order to obtain significant results. Furthermore, given that the current study had a relatively small sample size, it would be beneficial to carry out further research with larger sample sizes.

Although our results largely supported our predictions, as in Study 5.1, there was no effect of the framing of surveillance on level of identification with the city of Exeter (and thus not providing evidence in relation to RQ 8). However, as noted above, there was an effect on the extent to which participants felt they could trust the implementers of surveillance. This implies that the framing of surveillance did have some effect on the perceived relationship between participants and the implementers of the surveillance. Furthermore, we found that the direct (marginal) effect of the framing of surveillance on the perceived purpose of surveillance as safety was mediated by the extent to which participants felt they could trust the authorities' intentions with regard to the surveillance. This suggests that when people are informed about the target and purpose of surveillance, they use this information to infer whether or not the implementers are people to be trusted, and from this decide what the purpose of surveillance is likely to be. Finally, we have some evidence that this appraisal of the purpose of surveillance then helped to

explain the effect of framing of surveillance on people's views about privacy invasion, and also how acceptable and necessary surveillance is considered to be.

These mediation analyses only approached significance, but they suggest some role for appraisals of purpose in informing these evaluations.

The findings of this study, then, generally support our hypotheses and overall theory about how the framing of surveillance affects our perceptions of surveillance and its implementers. The findings of this study also complement those of the previous study. However, as several of the findings were marginal, we decided to conduct a third and final study, in another context, in an attempt to procure stronger support for our predictions.

Study 5.3

The design of Study 5.3 was similar to that of the first two studies in this chapter. However, this study investigated how framing affected perceptions of surveillance in a nightclub setting. As acknowledged in the quote that opened this chapter, people often resent surveillance that targets those who are indulging in behaviour that is 'bad' but not criminal. This setting was chosen because it is one in which such 'bad' behaviour frequently takes place, and in which different groups come together (e.g., members of the university and residents of the city). We were interested, as in the previous studies, in whether attitudes towards surveillance would be affected by who was being targeted: here, surveillance was operationalised as targeting either one's own group, or an out-group.

The setting for the study was a popular nightclub in Exeter which is frequented by both students and local people. We made use of this fact and utilised the identities of 'students' and 'locals' in our design. We sampled students only, and limited our sample to those who regularly attended the nightclub in question. The

nightclub currently uses a small number of surveillance cameras, and this is a fact likely to be known to customers, as the images from the cameras are displayed near the entrance. The university was identified as the source of increased surveillance at the nightclub (i.e., participants were told the university had requested extra surveillance). In this study, all measures used in Study 5.2 were again included. However, in addition, we included extra items assessing trust in the implementers of surveillance, as previously this was a one-item measure. Finally, as in Study 5.1, we measured negative emotions associated with surveillance.

In line with Research Question 7 and the results of Studies 5.1 and 5.2, we predicted that framing the surveillance as targeting participants' in-group (students) would lead to it being seen as more privacy invading and less acceptable and less necessary than when it was framed as targeting the out-group (locals). We expected that participants would appraise surveillance as being less for safety when it was framed as being targeted towards the in-group rather than the out-group. In line with these findings, we anticipated that surveillance which targeted the in-group would lead to more negative emotions associated with surveillance than surveillance which targeted the out-group. With regard to the implementers of surveillance, we predicted that surveillance which was framed as targeting the in-group would lead to lower identification with and less trust in the implementers of surveillance (i.e., the university), than surveillance which was framed as targeting the out-group (in line with RQ 8). In addition to the mediation findings from Studies 5.1 and 5.2, we expected to find that level of identification with the implementers would mediate the direct effect of the framing of surveillance on perceived privacy infringement.

Design

As before, this study had a simple two groups design with the factor 'Framing of Surveillance' (Targets In-group vs. Targets Out-group). The framing of surveillance was manipulated as described below, and participants were randomly assigned to conditions.

Participants

Participants were 124 University of Exeter students who were recruited by email to take part in an online study on a voluntary basis. They were aged from 18 to 36 with a mean age of 21. There were 34 males and 90 females.

Procedure

The study was presented as an investigation into people's views and feelings about the introduction of extra CCTV surveillance in and around a nightclub in Exeter City Centre. At the beginning of the questionnaire, participants read a short paragraph about the intended increase in the level of surveillance at the nightclub and who the targets would be. This paragraph acted as the framing manipulation, and is described below.

Manipulation of framing of surveillance. All participants were reminded that there was a small amount of CCTV in use around the nightclub in question, and were told this was about to be increased, at the request of the University of Exeter. In the 'targets in-group' condition, they were also told that this was because of previous incidents involving students. The paragraph went on to say that the CCTV was particularly to target students and so would be used mostly on a Wednesday night, which is a student night at the nightclub. In the 'targets out-group' condition, the paragraph emphasised the fact that the surveillance was being increased because of

previous incidents involving local people. In this case, they were told that the surveillance particularly targeted local people and so would mostly be used on nights that both locals and students attended, such as Friday nights.

Dependent Measures

Following the manipulation, participants went on to complete the questionnaire which contained the dependent variables as detailed below.

Participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Manipulation check. Three items measured to what extent participants felt they and other students were targeted by the increased surveillance. These items were, "The new CCTV cameras would be aimed at students", "I believe the new CCTV cameras would be aimed at non-students" (reversed), and "The new cameras would be used to target local people" (reversed), ($\alpha = .70$).

Privacy infringement. The same five items as used in Studies 5.1 and 5.2 were used to assess how much participants felt the extra CCTV around the nightclub would be an infringement on their privacy ($\alpha = .90$).

Acceptability of surveillance. The same four items as in Studies 5.1 and 5.2 were used to measure how acceptable participants thought the extra CCTV around the nightclub would be ($\alpha = .90$).

Necessity of surveillance. The same six items as were used in Study 5.2 were used to determine to what degree participants felt CCTV was necessary around this nightclub ($\alpha = .90$).

Appraisals of the purpose of surveillance. Four items adapted from a similar scale used in Chapter 2 (O'Donnell et al., 2010) were used to assess to what extent

participants thought the purpose of the extra CCTV cameras was to protect students' safety and target locals. Participants rated how much they felt each of the following reasons was the purpose of the cameras: "For my safety", "For the safety of other students", "To prevent locals from behaving inappropriately", and "Because of previous incidents involving locals", ($\alpha = .80$).

Negative emotions towards surveillance. Participants rated the same four negative emotions as in Study 5.1 (α = .81).

Identification. Four items, adapted from Doosje and colleagues (1995), were used to measure identification with the University of Exeter (as the instigators of the increased surveillance). The items used were, "I see myself as being part of the University of Exeter community", "I am pleased to be a member of the University of Exeter", "I feel strong ties with other members of the University of Exeter" and "I identify with other people within the University of Exeter community" ($\alpha = .90$).

Trust in university's intentions. Participants completed three items assessing the extent to which they trusted the university's intentions in requesting the extra surveillance cameras. One item was adapted from that used in Study 5.2, and the others were new items. Items were, "I trust that the University have Exeter students' best interests at heart with regard to introducing more CCTV at [nightclub]", "The University of Exeter has good intentions in requesting the use of more CCTV cameras", and "The University of Exeter cares about my welfare", ($\alpha = .89$).

Following completion of the questionnaire, participants read a written debrief and were offered the chance to enter a cash prize draw as compensation for taking part.

Results

Manipulation Check

Analysis of variance indicated a significant effect of the framing of surveillance on how much participants felt students were targeted by surveillance, F (1, 122) = 51.34, p < .01, η_{p^2} = .30. Participants felt they as students were significantly more targeted when surveillance was framed as targeting their in-group (M = 4.77, SD = 1.13), as opposed to targeting the out-group (M = 3.33, SD = 1.10). It was thus concluded that the manipulation was successful.

Descriptives

Table 5.1 Mean scores on all dependent variables, Study 5.3

		Target of surveillance	
		Out-group	In-group
		 	
Privacy infringement	Μ	3.09	3.24
	SD	1.26	1.47
A		E 47	F 4.4
Acceptability of surveillance	M	5.17	5.14
	SD	1.13	1.29
Necessity of surveillance	М	4.37	4.40
recognity of our comarioo	SD	1.09	1.31
	OD	1.00	1.01
Appraisals of purpose as safety	М	5.54	4.80
	SD	0.73	1.41
Negative emotions	M	2.66	2.88
	SD	1.08	1.46
	A 4	F 10	F 44
Identification	M	5.19	5.44
	SD	1.15	1.38
Trust in university's intentions	М	5.22	5.04
Trace in aniivoroity o internions	SD	1.13	1.45
	35	1.10	10

The main dependent variables for Study 5.3 were privacy infringement, acceptability of surveillance, necessity of surveillance, appraisals of the purpose of surveillance, negative emotions towards surveillance, identification with the

implementers of surveillance, and trust in the university's intentions. A summary of the mean levels on these DVs is presented in Table 5.1 (previous page).

Analysis of Variance

In order to further examine the effects of the framing of surveillance on each of the dependent variables, analysis of variance was performed on each variable. ANOVA revealed that there were no significant effects of framing on privacy infringement (F (1, 122) = 0.37, p = .54, η_P^2 < .01), acceptability of surveillance (F (1, 122) = 0.02, p = .88, η_P^2 < .01), necessity of surveillance (F (1, 122) = 0.02, p = .89, η_P^2 < .01), negative emotions towards surveillance (F (1, 122) = 0.92, p = .34, η_P^2 < .01), identification (F (1, 122) = 1.22, p = .27, η_P^2 = .01), or trust in the university's intentions (F (1, 122) = 0.61, p = .44, η_P^2 < .01). However, with regard to appraisals of the purpose of surveillance, there was a significant effect. Analysis of variance revealed that the framing of surveillance had a significant effect on

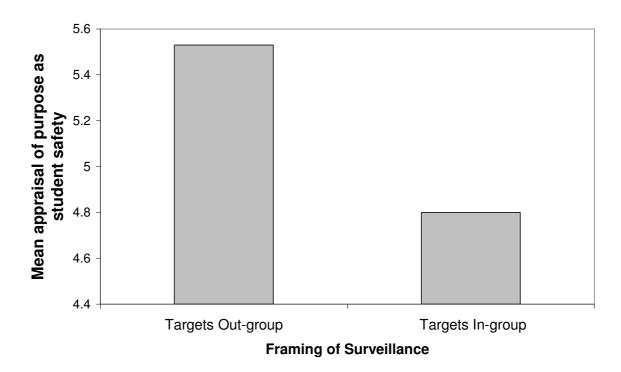


Figure 5.13 Mean appraisal that the purpose of surveillance was to protect students and target locals, as a function of the framing of surveillance

appraisals of the purpose of surveillance as protecting students, F(1, 122) = 13.34, p < .01, $\eta_{p^2} = .10$. Participants were more likely to perceive the purpose of surveillance as protecting students when it was framed as targeting the out-group (M = 5.54, SD = 0.73), rather than the in-group (M = 4.80, SD = 1.41); see Figure 5.13, above.

Discussion

Unfortunately, although the manipulation appeared to be successful, the results of this study did not replicate our previous findings or support our hypotheses; thus, they provided no evidence in line with Research Questions 7 or 8. There were no significant effects of the framing of surveillance on perceptions of privacy infringement, acceptability of surveillance, necessity of surveillance, trust in the implementers of surveillance, identification, or negative emotional reactions to surveillance. The only significant effect concerned the appraisal of surveillance as protecting students' safety. Here, we found that when surveillance was framed as targeting the in-group, participants considered its purpose to be protecting their safety significantly less than when it was framed as targeting the out-group. In the absence of any other complementary findings, all this really tells us is that participants definitely understood the manipulation. They knew when surveillance was aiming to help them and when it was not. So the question remains: why did this knowledge not have the same effects here as it had in the settings examined in Studies 5.1 and 5.2? We believe the answer lies in some methodological issues that become clear when we compare this study to the previous two, which we will do below in the General Discussion.

General Discussion

The studies presented in this chapter provide some evidence for the importance of how surveillance is framed in determining how it will be perceived (i.e., in line with RQ 7). Study 5.1 demonstrated that surveillance which was framed as targeting one's in-group led to more negative emotions related to being under surveillance, such as feeling more distrusted and anxious. These feelings were shown to underlie the direct effect that framing had on levels of privacy invasion. In turn, greater privacy infringement was shown to explain the effect that framing had on the acceptability of surveillance.

In Study 5.2, we replicated some of these findings and also elaborated on them, by fleshing out the process by which the differential framing of surveillance leads to varying levels of privacy infringement. The results for this study were statistically less robust than those of Study 5.1, but nonetheless painted a picture that was both internally consistent, and supported our previous findings. We found that framing surveillance as targeting the in-group led to higher privacy invasion, lower acceptability and necessity of surveillance, lower trust in the authorities that imposed the surveillance, and lower appraisals of the purpose of surveillance as safety. Indeed, the level of trust in authorities was shown to account for the effect of the framing of surveillance on the perceived purpose of surveillance. Thus, when surveillance was framed as targeting the out-group, this boosted the level of trust participants had in the authorities, and this enhanced perceptions that surveillance as being used for their safety.

In line with previous research (Chapter 2; O'Donnell et al., 2010), appraising the purpose of surveillance as safety was found to negatively predict levels of privacy invasion, providing extra evidence in line with Research Question 4.

Appraising the purpose as safety also predicted greater levels of both necessity and acceptability of surveillance. Indeed, appraisals of purpose partially mediated the effects of framing on all three of these variables, although these analyses did not reach acceptable significance levels. This study therefore complemented our previous findings, replicating the effects found in Study 5.1 for privacy invasion and acceptability. However, it also elaborated the processes by which different ways of framing surveillance can affect privacy invasion perceptions, and related outcomes such as the necessity of surveillance. These processes have not been investigated before. Support related to Research Question 7 was thus quite strong in terms of the consistent pattern that was demonstrated, despite the fact that some effects were not statistically robust.

In sum, both Studies 5.1 and 5.2 provide evidence to suggest that the way surveillance is framed can have a powerful impact on how people interpret the motives underlying surveillance and their emotional reaction to it; and correspondingly their evaluations of the extent to which the surveillance is invasive, and conversely, acceptable and necessary. These findings, like our findings related to source, move us beyond previous research which reported that surveillance is perceived as an invasion of privacy, but without specifying contextual variations (Honess & Charman, 1992; Lee & Brand, 2005; Whitty & Carr, 2006). They also go beyond previous research findings identifying the importance of target or purpose of surveillance in determining reactions to surveillance (e.g., Alge, 2001; Dinev et al., 2008; Friedman et al., 2006; Stanton & Weiss, 2000). This is because our studies investigated not only the effect of target and purpose, but also the process by which these factors affect how we appraise surveillance. Thus, although the findings were

not entirely as expected, we have still made progress on our prior understanding of this issue.

Limitations and Future Research

Despite the general overlap in findings, there were some inconsistent results. First, we found no effect of framing on identification in any of the studies. We had predicted that surveillance which targeted the in-group (and hence did not benefit it) would lead to the perception that the source was not one that participants would wish to identify with (relating to RQ 8). As alluded to earlier, the main reason for the absence of any effects may relate to the way identification was measured. We measured identification with one's national group (in Study 5.1) and identification with one's city (in Study 5.2). While we had assumed this would reflect people's feelings about those imposing the surveillance, it may be the case that participants did not conceive of the source of surveillance as being these groups. In Study 5.1, Britain was the group imposing the surveillance (or rather, some sub-section of it was – i.e., government) but it was also the group under surveillance (i.e., its citizens).

In Study 5.3, the group requesting the surveillance was the university, but this caused another problem. It seemed participants' high level of identification with their university (over 5 on a 7-point scale) meant that they condoned the surveillance regardless of its purpose, and their commitment to the university was unchanged by the manipulation. From our earlier research (Chapter 2; O'Donnell et al., 2010) we know that a sense of shared identity leads to surveillance being interpreted more positively. We had assumed that framing the surveillance as targeting the in-group would undermine this (as in Studies 3.1 & 3.2; O'Donnell et al., in press), but such a backlash against one's own group may be less likely when

the in-group is important to group members. We would still argue that the predicted effect on identification could occur. However, this would only be the case if people's identification with the group imposing the surveillance is more easily swayed.

In addition to the unexpected findings regarding identification, the results of Study 5.3 did not support any of the original findings, or our hypotheses. One reason for this might be that the framing of surveillance in Study 5.3 was different to that of Studies 5.1 and 5.2. Here, rather than targeting the in- and out-groups each for different reasons (e.g., in Study 5.1 the out-group were targeted for illegal immigration, something the British participants by definition were not guilty of), the surveillance in Study 5.3 was in place to stop bad behaviour around a nightclub. Spontaneous comments from participants in the 'targets out-group' condition revealed that they acknowledged that their group was just as guilty as the out-group of such behaviour. Likewise, those in the 'targets in-group' condition sometimes commented that local people could be just as bad as students. Therefore, it seems that participants may have felt in both instances that surveillance was necessary and acceptable, as both groups were responsible for the type of bad behaviour the surveillance was said to be targeting.

We suggest that an effect may be found if we strengthen the framing manipulation to emphasise that the purpose of the surveillance was unjustly targeting the in-group, as illegitimate treatment of the in-group is likely to lead to higher identification with the in-group and backlash against the out-group (Stott, Hutchison, & Drury, 2001; Stott & Reicher, 1998). Under such conditions, people may re-categorise so to exclude the implementer(s) of surveillance, creating an intergroup context and increasing identification with one's own group. Finally, the

setting of our study may have been inappropriate, as it is very much a public setting. In this age of widespread, prominent public surveillance there may not be much of an 'expectation of privacy' (e.g., Nieto, Johnston-Dodds, & Simmons, 2002) in places such as nightclubs – especially if participants felt their group (or the other group) was being legitimately targeted for bad behaviour.

Although this third study did not support predictions, we still have some evidence for the role of framing in perceptions of surveillance. Obviously we cannot draw too many conclusions from null findings, but these findings still inform our understanding of the process. We now have a more nuanced understanding of the process displayed in the Study 5.1 and 5.2 results, as we comprehend the conditions under which our predictions do not hold. We assume that the a priori level of identification with the implementer is vital. We propose that the source of surveillance is of paramount importance and may over-ride other contextual factors, such as target and purpose. Further research should investigate this as it has important implications not just for surveillance research, but also for social identity accounts of social influence and persuasion (Haslam, McGarty, & Turner, 1996; Turner, 1991; Turner, Wetherell, & Hogg, 1989).

Conclusions

The present findings build upon previous research which depicts surveillance as resulting in perceptions of privacy invasion, regardless of context (Honess & Charman, 1992; Lee & Brand, 2005; Whitty & Carr, 2006). It also advances research which identified the relationships between surveillance invasiveness, effectiveness, and acceptability (e.g., Fischhoff et al., 1978; Sanquist et al., 2008), because it not only examined the impact of target and purpose of surveillance on privacy invasion and acceptability, but also elaborated the *processes occurring between* such variables.

Although not all hypotheses were supported, these findings do help us to further refine our theories about the process at work, by showing the conditions under which our theories do not hold up.

In summation, the current studies demonstrate that when surveillance is seen as targeting the in-group, this leads to it being seen as more of an invasion of privacy than if it targets an out-group for the protection of one's in-group. This fits with previous research showing that surveillance is seen as less invasive and more positive when it is effective (Fischhoff et al., 1978; Sanquist et al., 2008) and protects one's own group (Chapter 2; O'Donnell et al., 2010). The way in which surveillance is framed was shown to affect people's emotional reaction to surveillance, their level of trust in the implementers, and appraisals about the purpose of surveillance, which in turn informed their perceptions of the invasiveness of the surveillance. Correspondingly, perceived privacy invasion was shown to predict and generally be associated with how acceptable and necessary surveillance was seen to be.

The findings come with several caveats based on the failure to replicate these results in the final study. It seems that framing of surveillance may not be as important as the source of surveillance in determining how it is evaluated. Furthermore, legitimate targeting of the in-group does not seem to be viewed negatively, perhaps because people recognise that their group is doing wrong and deserves to be held accountable. Overall, these findings offer important insights regarding the framing of surveillance and source of surveillance in determining people's responses to being under surveillance. In the end, as highlighted at the beginning of the chapter, context – as defined by the interaction between the framing of the surveillance and who it comes from – is key.

CHAPTER 6

THE SITUATIONAL APPROPRIATENESS OF SURVEILLANCE: DOES HIGH THREAT MAKE IT OK TO BE WATCHED?

"They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety." – Benjamin Franklin

"... to those who scare peace-loving people with phantoms of lost liberty, my message is this: Your tactics only aid terrorists for they erode our national unity and diminish our resolve." – US Attorney General John Ashcroft (CNN, 2001)

"But is the nature of the threat ... so great that it could permanently shift the balance between personal privacy and national security in the direction of the latter priority?" – McAdams (2005, p.480)

The purpose of public CCTV surveillance is to prevent and solve crime (Home Office, 2007). As indicated in the above quotes, sometimes people are willing to sacrifice some degree of personal liberty for protection and safety, and sometimes they are not. Those implementing surveillance systems arguably need to strike a balance between protection and privacy (The Technology and Privacy Advisory Committee, 2004). Prior research, including that already presented in this thesis, suggests that people are not so much concerned about the presence of surveillance, but they are concerned about how the information that is gathered will be used, by whom, and for what purpose (Friedman, Kahn, Hagman, Severson, &

Gill, 2006; Levine, 2000; Chapter 2, O'Donnell, Jetten, & Ryan, 2010; Chapter 3, O'Donnell, Jetten, & Ryan, in press; Chapter 4, O'Donnell, Ryan, & Jetten, 2009; Chapter 5). Our previous studies investigated how perceptions of surveillance are affected by salient intra- and inter-group dynamics. In particular, we focused on how surveillance appraisals are affected by the identity of the implementer (i.e., RQ 3), but also how surveillance impacts on those who impose it, depending on their group membership (RQs 5 & 6) and the perceived purpose for the surveillance (RQ 7). The research in the present chapter aims to build upon this reasoning, by investigating how people's judgements about the acceptability of surveillance are affected by the perceived level of threat. As before, we investigate how the appropriateness of surveillance is framed by the context, but we are now focusing on the broader context (i.e., beyond the relationship between those watching and those being watched) and the impact that has on perceptions of surveillance.

Previously, research has shown that surveillance is considered more acceptable and less invasive when it is shown to be effective in preventing crime (Sanquist, Mahy, & Morris, 2008). Indeed, we have demonstrated the importance of the perceived purpose of surveillance in affecting perceptions of surveillance and its implementers, both in terms of the direct effect of how surveillance is framed (Studies 5.1 & 5.2, Chapter 5) and in underlying the effect of shared identity on how surveillance is viewed (Studies 2.1 & 2.2, Chapter 2; O'Donnell et al., 2010). Thus, we have seen that when people are told surveillance is protecting them, or that it comes from an in-group source (which is likely to want to protect them), this has the effect of making surveillance seem more necessary and acceptable. In this chapter, we consider how the broader social context affects the perceived necessity of surveillance, and how this in turn impacts upon the acceptability and perceived

invasiveness of surveillance. There is some correlational evidence that evaluations of surveillance are more favourable when people consider that there is a need for it (Dinev, Hart, & Mullen, 2008), and in settings where it could be considered more necessary because threat perceptions are high – for example, in a city centre (Dixon, Levine, & McAuley, 2003). However, there has yet to be an experimental demonstration of this effect. This is important to demonstrate because it will elaborate our understanding of the factors affecting people's appraisals of surveillance, and the process they go through to arrive at their evaluations. Using Threat to Excuse Surveillance – Direct Effects

Aside from the theoretical reasoning which suggests that threat will have an important impact on an individual's interpretation of surveillance, there are also concrete examples of recent threats being used to promote the acceptance of increased surveillance powers. For example, the US government used the intergroup threat made salient by 9/11 to pass the USA Patriot Act in the weeks after the terrorist attacks (McAdams, 2005), leading to an intensification of the expansion of surveillance (Lilly, 2006). Indeed, some have argued that the threat imposed by 9/11 actually *changed* the rights American citizens have to personal privacy, because in the face of such threats, there is a belief that surveillance needs to be increased, and hence a reduced expectation of privacy (Nieto, Johnston-Dodds, & Simmons, 2002). Similarly, closer to home, the context of the murder of local child James Bulger, was used to justify the introduction of a new CCTV network in Liverpool in 1994 (Coleman & Sim, 2000).

Not just current, but also potential *future* threats are used to justify the introduction of new or heightened surveillance. For example, it has been suggested that public officials have used the Olympic Games to excuse the introduction of

surveillance measures that would not otherwise be tolerated (Boyle & Haggerty, 2009). Likewise, in his introduction to the National Security Policy of Canada, the then-Prime Minister Paul Martin invoked the recent inter-group threats elsewhere in the world in order to emphasise the need to protect Canadians from possible *future* threats by introducing new surveillance measures (Privy Council Office, 2004).

This suggests that additional surveillance and security have been introduced not only to prevent crime such as terrorism (Klauser, 2009; Levi & Wall, 2004), but also to actively reassure the public that they are being protected against such threats (Bassett, 2007; Chen & Noriega, 2003; Stalder, 2002) and to assure them that various public places are safe to use (Norris, McCahill, & Wood, 2004; Surette, 2005). It may be argued that those in control of surveillance and security want to be seen to act decisively and with an eye on preventing crime before it has even happened (Amoore & de Goede, 2008; Coleman & Sim, 2000; Ditton, 2000; Lyon, 2008; Wilson & Sutton, 2004).

However, it is also clear that not everyone is in favour of legitimising surveillance on the back of salient collective threats. With reference to the Canadian example, some commented that the new measures threatened the very freedoms they sought to protect (Bell, 2006). Similarly, as noted by McAdams (2005), it has been argued that the terms of the US Patriot Act allowed the government to impose overly extensive surveillance on innocent citizens not suspected of terrorism (see also CNN, 2001; Gellman, 2002; Haggerty & Gazso, 2005). US Attorney General John Ashcroft responded to these critics by emphasising the threat of terrorism to America and warning that those valuing their liberty were aiding terrorists (as seen in the quote from Ashcroft above; see also Bassett, 2007), effectively making use of the highly salient threat to pass the Act (Donohue, 2006).

The question of the current research is whether or not this technique will be successful, and if so, the processes by which this works. Previous research has shown that we are more accepting of surveillance if it is effective at protecting our safety (Fischhoff, Slovic, Lichtenstein, Read, & Combs, 1978; Sanquist et al., 2008; Slobogin, 2007). We therefore argue that people may be more accepting of surveillance when they feel it is necessary for their protection. If this is the case, it seems likely that surveillance imposed in a threatening environment would be evaluated more positively (RQ 9).

Using Threat to Excuse Surveillance – Via Identity Processes

In addition to the direct impact we expect varying levels of threat to have on perceptions of surveillance, previous research also suggests that there may be an indirect route via identification (RQ 10). We know from social identity theory that out-group threat or inter-group conflict often leads to in-group cohesion and increased identification (e.g., Tajfel & Turner, 1979; see also LeVine & Campbell, 1972; Stein, 1976). Recent evidence from crowd behaviour research also supports this prediction. It has been found that threat from an out-group leads people to define themselves to a greater degree by their group identity(ies), because action from the out-group leads to a feeling of 'us' versus 'them', and enhances the sense that the group needs to stick together (Stott & Drury, 2000; Stott, Hutchison, & Drury, 2001). Finally, research based on terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986) has suggested that threat to one's ingroup increases identification. TMT predicts that the threat of mortality can be assuaged by upholding a cultural worldview, associated with some relevant social category. In line with this, Moskalenko, McCauley, and Rozin (2006) showed that

following the terrorist attacks of September 11, 2001, Americans identified more highly with the US than before the attacks.

Given the evidence that threat to the in-group results in greater identification, we anticipate that a high threat manipulation should increase identification with the group that is threatened. Furthermore, based on our previous finding that identification leads to more positive views of surveillance (Study 2.1; O'Donnell et al., 2010), we argue that identification should mediate the direct effect of high threat on increased support for surveillance. In other words, high threat, resulting in greater identification with the in-group, should lead participants to feel more supportive of surveillance because surveillance is needed to protect their group.

The Present Research

The current research aims to investigate (a) the way threat determines what level of surveillance appears to be appropriate, (b) the way people's attitudes towards surveillance depend on such contextual cues, and finally (c) how these effects are related to levels of identification elicited by the presence or absence of threat.

In this chapter, we present two studies. Study 6.1 investigates the effect of being under high or low threat in a city centre, on perceived privacy infringement, necessity of surveillance, appraisals of the purpose of surveillance, and identification with the source of surveillance. Study 6.2 builds upon the first study by incorporating a second factor, level of surveillance, in order to test the prediction that surveillance is most supported when it is at a level appropriate to the situation. This study focuses on largely the same variables, with the addition of measures of the acceptability of surveillance, and trust in the authorities who impose

surveillance. Study 6.2 samples students within a specific university department, and thus examines our hypotheses in a smaller and more close-knit group than Study 6.1 (i.e., city identity).

We expect high threat to cause high surveillance to be seen as more appropriate (relating to RQ 9), as demonstrated by decreased perceptions of privacy infringement, higher acceptability and necessity of surveillance, and an increased perception that surveillance is being used to protect the in-group and that the imposers of surveillance could be trusted. Furthermore, we predict that high levels of threat (compared to low threat) should lead to increased identification with the group. Finally, we predict that identification will mediate the direct effect of threat on outcomes such as privacy infringement, acceptability of surveillance and appraisals of surveillance as benefiting participants (RQ 10).

Study 6.1

Study 6.1 investigated the effect of varying levels of threat on perceptions of surveillance in a city centre setting. The study was set in Cardiff, and sampled participants living in and around the city. Like almost all UK cities, Cardiff has a network of CCTV cameras implemented and maintained by the city council. This study aimed to demonstrate that a higher level of threat would make surveillance seem more acceptable, both directly, by making it more necessary to prevent antisocial behaviour; and indirectly, by increasing participants' level of identification with the city.

We predicted that in the high compared to low threat condition, perceptions of privacy infringement should be lower, and that necessity of surveillance, perceptions that surveillance is being used to prevent bad behaviour, and identification with the group should all be higher. Finally, several mediating effects

were predicted. It was predicted that the direct effect of level of threat on perceived privacy infringement would be mediated by necessity of surveillance. Our reasoning was that when people felt surveillance was more necessary, they should be less concerned with privacy issues, making surveillance seem less invasive. In turn, necessity of surveillance would be mediated by appraisals that the purpose of surveillance was to prevent bad behaviour, as if surveillance was being used for this legitimate purpose, it should be seen as more necessary. This prediction is based partly upon our findings from Chapter 5 which demonstrate that surveillance with a purpose that benefits the in-group is seen as more necessary. Finally, and in line with our earlier findings (e.g., Studies 2.1 & 2.2; O'Donnell et al., 2010), the effect on appraisals of surveillance as preventing bad behaviour would be mediated by increased identification with Cardiff, as higher identification should lead participants to perceive surveillance as serving a useful and legitimate purpose.

Method

Design

The experiment took a two group design with the factor 'Level of Threat' (Low vs. High). The factor was manipulated between participants and referred specifically to threat of violent crime. Participants were assigned to conditions randomly.

Participants

Participants were an opportunity sample of 40 Cardiff residents. They were aged from 19 to 60 with a mean age of 35. There were 12 males and 28 females, and they took part voluntarily.

The study was presented as an investigation into people's views and feelings about the use of CCTV surveillance in Cardiff City Centre. If interested in participating, participants read a supposedly official report about Cardiff's crime statistics, which contained the manipulation as detailed below.

Manipulation of level of threat. In the low threat condition, the report began with a headline proclaiming, "Cardiff is Safe". It then went on to say that according to various sources, Cardiff has a surprisingly good record for violent crime and sets a good example to the rest of the country. Various examples were given of Cardiff's low crime statistics. In contrast, those in the high threat condition were presented with the headline "Cardiff is Dangerous", followed by a report stating that according to various sources, Cardiff has a bad record for violent crime and sets a terrible example to the rest of the country. Examples were given of Cardiff's high crime statistics. Participants in both conditions then were presented with an almost identical final paragraph reporting that Cardiff already has a high level of CCTV cameras in place, with plans to install more.

Dependent Measures

Following the threat manipulation, participants went on to complete the questionnaire which contained the dependent variables. Participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Threat manipulation check. The effectiveness of the threat manipulation was checked using a four item scale. The four items were, "We are under high threat of crime in Cardiff", "Cardiff residents feel safe living here" (reversed), "There is no

need to worry about the threat of crime here in Cardiff' (reversed), and "The fear of crime is a big issue for Cardiff residents" ($\alpha = .88$).

Privacy infringement. In order to determine the extent to which participants felt that CCTV in Cardiff was an infringement on their privacy, a five-item scale was used. This was adapted from Chapter 2 (O'Donnell et al., 2010) which was originally adapted from Alge, Ballinger, Tangirala, and Oakley (2006). The items were, "The use of CCTV cameras in Cardiff city centre is an invasion of my privacy", "I feel comfortable with the level of CCTV surveillance in Cardiff city centre" (reversed), "The CCTV in Cardiff city centre makes me feel uneasy", "I feel like someone is always watching me", and "I am concerned about my privacy in Cardiff city centre" ($\alpha = .81$).

Necessity of surveillance. The same six items as were used in Study 5.2 measured the extent to which participants felt CCTV was necessary in Cardiff city centre (α = .86).

Appraisal of the purpose of surveillance. A single item, taken from a longer scale used in Chapter 2 (O'Donnell et al., 2010), was used. Participants rated how much they felt the purpose of the cameras was: "to prevent bad behaviour".

Identification. Identification with Cardiff was measured using the same two item scale used in Study 2.1 (O'Donnell et al., 2010). These two items were, "I feel a strong sense of belonging to the city of Cardiff" and "I feel strong ties with other people from Cardiff" (adapted from Doosje, Ellemers, & Spears, 1995; r = .79, p < .01).

When they had completed the questionnaire, participants were thanked for their time and given a written debriefing. Finally, they were offered a sweet or chocolate as compensation.

Preliminary Analyses

Three participants emerged as consistent outliers in the analyses, and were therefore excluded. They were not included in any of the analyses reported below.

Threat Manipulation Check

Analysis of variance revealed a marginally significant effect of the threat manipulation on perceived threat of violent crime, F(1, 34) = 3.88, p = .057, $\eta_p^2 = .10$. Specifically, participants perceived a higher level of threat in the high threat condition (M = 4.53, SD = 1.25), than in the low threat condition (M = 3.74, SD = 1.16).

Privacy Infringement

Analysis of variance indicated that the effect of level of threat on perceived privacy infringement was significant, F(1, 35) = 5.52, p = .03, $\eta_{P}^2 = .14$. Participants

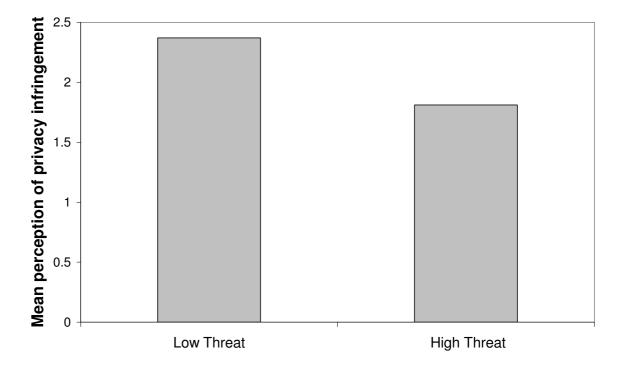


Figure 6.1 The main effect of level of threat on perception of privacy infringement

reported greater levels of privacy infringement when threat was low (M = 2.37, SD = 0.92), as opposed to high (M = 1.81, SD = 0.41). See Figure 6.1, previous page.

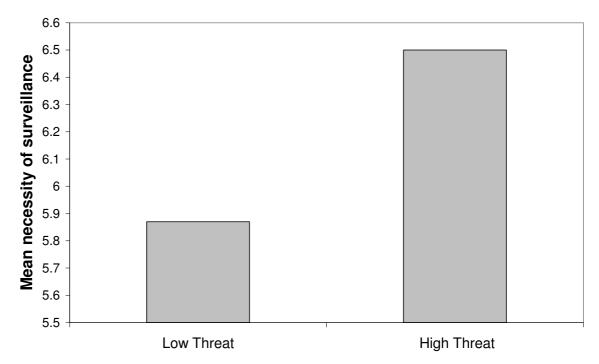


Figure 6.2 The main effect of level of threat on perceived necessity of surveillance

Necessity of Surveillance

Analysis of variance showed that there was a significant effect of level of threat on the perceived necessity of surveillance, F(1, 35) = 8.28, p < .01, $\eta_{P}^2 = .19$. Participants viewed surveillance as more necessary when threat was high (M = 6.50, SD = 0.51), rather than low (M = 5.87, SD = 0.79). See Figure 6.2 above. Appraisal of the Purpose of Surveillance

Analysis of variance indicated that appraisals of the purpose of surveillance were significantly affected by level of threat, F(1, 34) = 4.58, p = .04, $\eta_p^2 = .12$. Participants were more likely to perceive the purpose of surveillance as preventing bad behaviour when threat was high (M = 6.41, SD = 0.51), rather than low (M = 5.63, SD = 1.42) – see Figure 6.3, overleaf.

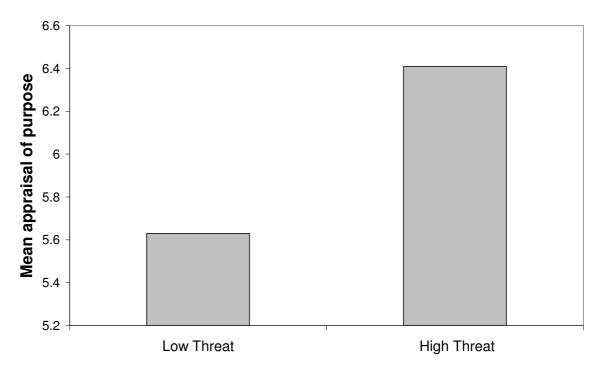


Figure 6.3 The main effect of level of threat on appraisals of the purpose of surveillance

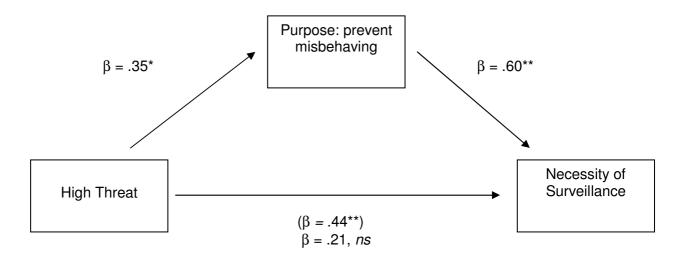
Identification

Analysis of variance showed no significant effect of level of threat on identification with Cardiff, F(1, 35) = 0.03, p = .87, $\eta_{\rm P}^2 < .01$, ns.

Mediational Analyses

A series of regression analyses were carried out, following recommendations from Baron and Kenny (1986), to investigate whether appraisals of the purpose of surveillance would mediate the effect of level of threat on perceived necessity of surveillance. The independent variable, level of threat, was coded as: low threat (1), high threat (2). Regression analyses revealed that level of threat significantly predicted necessity of surveillance, $\beta = .44$, p < .01, and also the mediator, appraisals of the purpose of surveillance, $\beta = .35$, p = .04. Finally, when level of threat and appraisals of the purpose of surveillance were both entered as predictors of necessity of surveillance, appraisals of the purpose of surveillance significantly

predicted necessity of surveillance, $\beta = .60$, p < .01, and the effect of level of threat was no longer significant, $\beta = .21$, p = .12, ns. A Sobel test confirmed that the mediator was significant (Z = 1.93, p = .05). See Figure 6.4, below.

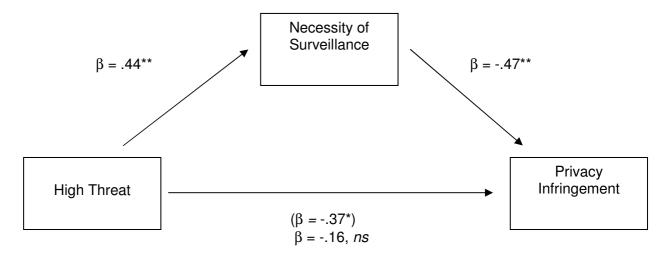


Note: ** p < .01; * p = .04

Figure 6.4 Path diagram illustrating that appraisals of the purpose of surveillance as preventing misbehaviour mediates the effect of level of threat on perceived necessity of surveillance

In a second set of analyses, we tested the prediction that perceived necessity of surveillance would mediate the direct effect of level of threat on privacy infringement. The independent variable was coded as before. Regression showed that level of threat significantly predicted levels of privacy infringement, $\beta = -.37$, p = .03. Furthermore, level of threat also significantly predicted the mediator, necessity of surveillance, $\beta = .44$, p < .01. When level of threat and necessity of surveillance were both allowed to predict privacy infringement, it was found that necessity of surveillance significantly predicted privacy infringement, $\beta = -.47$, p < .01, and that the effect of level of threat was reduced to non-significance, $\beta = -.16$, p = .16, p = .16

= .31, ns. The mediator was significant (Sobel test: Z = -2. 08, p = .04) – see Figure 6.5 below.



Note: ** p < .01; * p = .03

Figure 6.5 Path diagram illustrating that perceived necessity of surveillance mediates the effect of level of threat on privacy infringement

Due to the fact that there was no significant effect of threat on identification, the third predicted mediation effect was not tested.

Discussion

The results of Study 6.1 provided support for some, but not all, of our hypotheses. As expected, there was a direct effect of the level of threat in the environment on perceptions of surveillance. High threat led to a more positive evaluation of surveillance than low threat. In addition, high threat led to surveillance being appraised as aiming to prevent bad behaviour, as more necessary, and less privacy invading than low threat (support related to RQ 9). Further, surveillance was seen as less invasive *because* it was viewed as more necessary, and it was seen as more necessary to the extent that high threat gave the impression surveillance was being used to prevent bad behaviour. This pattern of results is in keeping with what we expected, and fits well with previous literature showing that a cost-benefit analysis

underlies the appraisal of surveillance (Fischhoff et al., 1978; Sanquist et al., 2008) and that surveillance is seen as less invasive when people think we need it (Dinev et al., 2008). It is also complementary to our own previous research showing that people are more accepting of surveillance that aims to benefit the in-group, such as that presented in Chapters 2 and 3 and related to Research Questions 4 and 5 (O'Donnell et al., in press, 2010).

Our predictions regarding the indirect effect of threat via identification (relating to RQ 10) were not supported. In contrast to previous research (e.g., Moskalenko et al., 2006; Stott et al., 2001), threat from an out-group did not increase in-group identification, and hence identification did not mediate the relationship between threat and evaluations of surveillance. There may be several reasons why we did not observe the predicted effects. Despite the fact that the mean level of identification was over five on a seven-point scale, it could be the case, as suggested in Chapter 5, that the identity chosen was too broad, particularly for those who live in the surrounding area of Cardiff, rather than in the city centre itself. It may also be the case that the threat did not seem targeted specifically towards the in-group. As noted in previous literature (Moskalenko et al., 2006; Stott & Drury, 2000), an increase in in-group identification is caused by a threat from an out-group specifically towards the in-group. Thus, an out-group threat need not lead to increased identification with any and all of one's group memberships – only those identities to which the threat is relevant. Therefore, it is possible that the study did not adequately emphasise the fact that the threat was towards Cardiff residents as a group.

In light of the mixed findings of Study 6.1, we carried out a follow-up study in a different context, in an attempt to obtain stronger support for our hypotheses.

Furthermore, we aimed to demonstrate, using a more complex design, that surveillance must be fitting with the level of threat that is apparent in order to be viewed positively.

Study 6.2

This study was set in the School of Psychology at the University of Exeter, making use of undergraduate psychology students for its sample. There are a small number of CCTV cameras in place in the School, and we utilised this fact in the study. We aimed to extend and build upon the results of Study 6.1, both by providing support for our hypotheses regarding identification, and by demonstrating the need for there to be a match between the level of threat present in the environment and the level of surveillance that is in place. Thus, in this study, we manipulated both level of threat and level of surveillance.

In an attempt to rectify the issues in Study 6.1, this study made use of a more specific identity, namely, the 'School of Psychology' identity. In addition, we took care to emphasise that the threat posed by the out-group was specifically relevant to members of the School of Psychology, as detailed below. This was because we aimed to demonstrate that threat against the in-group would increase identification, and this would only be effective if the threat seemed relevant to the group itself.

It was anticipated that there would be interactive effects of threat and surveillance on how surveillance was perceived, such that surveillance would be viewed more positively in the 'match' conditions (i.e., where both surveillance and threat are either low, or high) than in the 'mismatch' conditions (i.e., where one is high and the other is low). Thus, in line with our previous findings (e.g., Studies 3.1 & 3.2; O'Donnell et al., in press), we predicted that when threat was low, high surveillance would be seen as more invasive than low surveillance. When threat was

high, surveillance would appear less invasive. The same interaction was predicted for the perceived acceptability of surveillance. We measured the perceived purpose of surveillance in terms of the degree to which surveillance would be used to both protect and target students, and predicted surveillance would be seen as more likely to be ensuring safety in the 'matched' conditions, and least likely in the high threat, low surveillance condition. Likewise, surveillance would be seen as targeting students least in the 'matched' conditions, and most in the low threat, high surveillance condition. These predictions are all related to Research Question 9.

In line with Research Question 10, we predicted that there would be interactive effects of threat and surveillance on identification and trust in the School of Psychology's intentions, such that identification and trust would be highest when there was a match between level of threat and surveillance. This was because we anticipated people would identify with the group more and feel they were responding appropriately to the level of threat, when the surveillance imposed by the group seemed appropriate to the situation. By contrast, identification and trust would drop when the level of surveillance was not in keeping with the level of threat, because the group's motives would be called into question.

In addition to these effects, we anticipated that the interactive effect of threat and surveillance on acceptability of surveillance should be mediated by perceived privacy infringement, because surveillance which is in fitting with the level of threat and is not invasive should therefore be seen as more acceptable. Second, the interactive effect on privacy invasion should itself be mediated by appraisals of the purpose of surveillance, as in Chapter 2 (O'Donnell et al., 2010). Finally, the effect of threat and surveillance on appraisals about the purpose of surveillance should be mediated by level of identification with the School of Psychology (related to RQ 10).

The rationale was that greater identification with the School, as a result of the match between level of threat and level of surveillance, should lead to the appraisal that surveillance is being used to benefit members of the School rather than target them (in line with RQ 4).

Method

Design

The study took the form of a 2 (Level of Threat: Low vs. High) X 2 (Level of Surveillance: Low vs. High) between-participants design. Both factors were manipulated as detailed below, and participants were randomly assigned to conditions.

Participants

Participants were 77 undergraduate psychology students, who voluntarily took part in an online questionnaire in return for course credit. They were aged between 18 and 44, with a mean age of 20 years. There were 13 males and 64 females.

Procedure

Participants were invited to take part in the study by email. It was presented as an investigation of psychology students' views on the level of security to be implemented in their department building. The level of threat present in the psychology building was manipulated, as was the level of surveillance that would soon be in place. Participants completed manipulation checks in line with both manipulations then went on to complete the dependent measures.

Manipulation of level of threat. Participants read a paragraph informing them that the level of threat of crime from intruders in their department building was either relatively low or relatively high. The paragraph emphasised that the number of

incidents against psychology students in their department over the last year had either been much lower than in department buildings at other universities, or much higher.

Manipulation of level of surveillance. All participants read some information reminding them that there was currently a low level of surveillance present in their psychology department building. Participants then read that there had been a review recently to decide whether to keep the security at the current level (i.e., one or two cameras) or to introduce many more cameras around the building. Finally, participants were informed either that it had been decided that the number of cameras should stay the same (low surveillance condition) or that it should be increased (high surveillance condition). Whatever decision had been reached on the level of surveillance was referred to as the 'new surveillance plan'.

Dependent Measures

Following each manipulation, participants were asked to complete the relevant manipulation checks, and then continued on to the dependent measures. Unless otherwise specified, participants responded to all measures on a 7-point Likert scale, ranging from (1) "strongly disagree" to (7) "strongly agree".

Manipulation checks. The same four items as were used in Study 6.1 checked the amount of threat participants felt students were under in their department building ($\alpha = .89$). Four items were then used to assess whether participants understood the level of surveillance that would be in place under the new surveillance plan, with high scores indicating that a high/increased level of surveillance would be in operation, and low scores indicating that a low/unchanged level of surveillance would be in operation: "The amount of surveillance cameras in [department building] will increase under the new surveillance plan", "Under the

new surveillance plan, there will be very few cameras in [department building]" (reversed), "The number of cameras present in [department building] is to stay the same according to the new surveillance plan" (reversed), and "The new surveillance plan calls for lots of cameras to be placed around [department building]" ($\alpha = .96$).

Privacy infringement. The same five items that were used in Study 6.1 were used to assess to what extent participants felt the new surveillance plan would infringe upon their privacy, ($\alpha = .88$).

Acceptability of surveillance. The same four items as used in earlier studies (Studies 5.1, 5.2, & 5.3, Chapter 5) were used to determine how acceptable participants felt the new surveillance plan was ($\alpha = .88$).

Appraisal of the purpose of surveillance – protecting students. In order to assess the degree to which participants felt the surveillance was being used to protect them, participants rated to what extent they felt each of the following reasons was the purpose of the new surveillance plan: "For my safety", "For the safety of other students", and "To prevent intruders from getting into [department building]" ($\alpha = 0.85$).

Appraisal of the purpose of surveillance – targeting students. Three items were used to measure the degree to which participants felt the new surveillance was intended to target students. Participants rated how much they felt each of the following reasons was the purpose of the cameras: "To check up on students", "So staff know where students are and what they are doing", and "To see how students behave when lecturers are not present" ($\alpha = .81$).

Identification. Four items, adapted from Doosje, Ellemers, and Spears (1995), measured the extent to which participants identified with the School of Psychology. These items were the same as those used in Study 5.3, Chapter 5 (α = .94).

Trust in the School of Psychology's intentions. Here, the same three items as were used in Study 5.3 (Chapter 5) were used to assess perceptions of the School's intentions in imposing the new surveillance plan. However, one extra item was added. The item was: "I do not think the School of Psychology had students' interests in mind when devising the new surveillance plan" (reversed) (four items; $\alpha = .87$).

Results

Preliminary Analyses

Six participants emerged as outliers on the manipulation checks, suggesting they had misunderstood or failed to accept the validity of the manipulations. They were thus excluded from all further analyses.

Threat Manipulation Check

Analysis of variance revealed only a significant main effect of level of threat on how threatened participants felt in their department building, F(1, 67) = 39.85, p < .01, $\eta_{\rm p}{}^2 = .37$. Specifically, those in the high threat condition felt there was a greater threat (M = 3.84, SD = 1.40) than did those in the low threat condition (M = 2.14, SD = 0.73). It was thus concluded that the threat manipulation had been successful.

Surveillance Manipulation Check

Analysis of variance showed a significant main effect of level of surveillance on perceived level of surveillance, $F(1, 67) = 286.19, p < .01, \eta_{p^2} = .81$. Those in

the high surveillance condition perceived surveillance to be significantly higher (M =6.16, SD = 0.74) than those in the low surveillance condition (M = 2.17, SD = 1.26). The manipulation of surveillance was therefore successful. However, there was also a significant interaction of threat and surveillance on this manipulation check, F(1,67) = 7.89, p < .01, $\eta_p^2 = .11$. Simple main effects confirmed the main effect of surveillance condition. However, it was also found that in the low surveillance conditions, there was a significant difference in perceived level of surveillance caused by level of threat, F(1, 67) = 6.33, p = .01, $\eta_p^2 = .09$. When threat was high, participants perceived that surveillance was significantly lower (M = 1.75, SD =0.95) than when threat was low (M = 2.58, SD = 1.41). It thus appears that there was some evidence of anchoring whereby the perceived level of threat changed the level of surveillance that participants felt was appropriate, and this impacted on how much surveillance they felt was in place. When threat was high, low surveillance was inadequate and so was perceived as actually being at a lower level than the same surveillance as seen by those not under high threat. No difference was observed across the high surveillance conditions.

Privacy Infringement

Analysis of variance revealed no significant effects of level of threat or level of surveillance on privacy infringement (all ps > .10).

Acceptability of Surveillance

Analysis of variance revealed a significant effect of threat on how acceptable the new surveillance plan was considered to be, F(1, 67) = 6.52, p = .01, $\eta_{P}^2 = .09$. Surveillance was seen as more acceptable under conditions of low threat (M = 4.95, SD = 1.02) rather than high threat (M = 4.27, SD = 1.38). There was also a significant main effect of level of surveillance on acceptability, F(1, 67) = 4.78, p = 1.02

.03, $\eta_P^2 = .07$. High surveillance was rated as more acceptable (M = 4.90, SD = 0.75) than low surveillance (M = 4.32, SD = 1.55). Both of these main effects were qualified by a significant interaction, F(1, 67) = 9.70, p < .01, $\eta_P^2 = .13$ (see Figure 6.6, below). Simple main effects showed that when surveillance was low, the acceptability of surveillance differed significantly depending on level of threat, F(1, 67) = 16.29, p < .01, $\eta_P^2 = .20$. Specifically, as predicted, low surveillance was more acceptable when threat was also low (M = 5.07, SD = 1.26) rather than high (M = 3.57, SD = 1.48). However, contrary to predictions, there were no significant differences in acceptability across the high surveillance conditions, F(1, 67) = 0.16, p = .70, $\eta_P^2 < .01$, η_S . Across the high threat conditions, simple main effects demonstrated a significant effect of level of surveillance on acceptability, F(1, 67) = 14.25, p < .01, $\eta_P^2 = .18$. When threat was high, surveillance was more acceptable when it was also at a high level (M = 4.97, SD = 0.82) as opposed to low (M = 3.57,

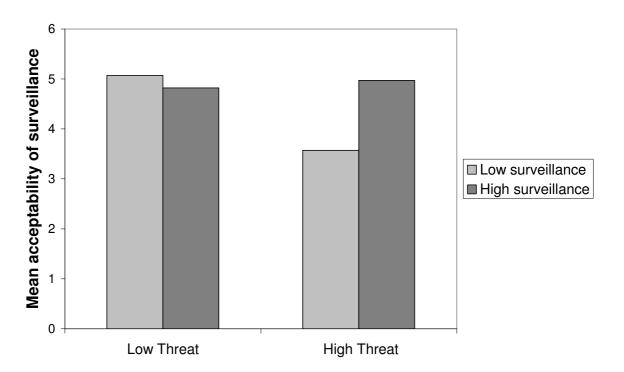


Figure 6.6 The effects of level of threat and level of surveillance on acceptability of surveillance

SD = 1.48). This was in line with predictions. However, and contrary to predictions, there was no significant difference in acceptability of surveillance across the low threat conditions, F(1, 67) = 0.43, p = .52, $\eta_{p^2} < .01$, ns.

Appraisal of the Purpose of Surveillance – Protecting Students

Analysis of variance showed that there was a significant main effect of level of surveillance on the extent to which the new surveillance plan was seen as aiming to protect students, F(1, 67) = 10.77, p < .01, $\eta_{p^2} = .14$. Participants believed the new surveillance plan's purpose was to protect students significantly more when the surveillance was high (M = 6.21, SD = 0.63) as opposed to low (M = 5.35, SD = 1.43). There was no significant main effect of the level of threat, and the interaction between level of threat and level of surveillance was not significant.

Appraisal of the Purpose of Surveillance – Targeting Students

Analysis of variance revealed that there were no significant effects of level of threat or level of surveillance on the degree to which participants felt the new surveillance plan aimed to target students (all ps > .10).

Identification

Analysis of variance failed to demonstrate any significant effects of level of threat or level of surveillance on level of identification with the School of Psychology (all ps > .10).

Trust in the School of Psychology's Intentions

Analysis of variance demonstrated that there was a significant main effect of level of threat on participants' view of the School's intentions, F(1, 67) = 4.22, p = .04, $\eta_{P}^2 = .06$. Participants felt that the School cared more about student interests when threat was low (M = 5.80, SD = 0.93) as opposed to high (M = 5.37, SD = 1.17). This was perhaps because participants felt their interests were more protected

if threat was low (i.e., the School was already looking after them). There was also a significant main effect of the level of surveillance, F(1, 67) = 22.23, p < .01, $\eta_p^2 = .25$. Specifically, participants felt the School had their best interests at heart more when surveillance was high (M = 6.09, SD = 0.63) rather than low (M = 5.08, SD = 1.18). These two main effects were qualified by a significant interaction, F(1, 67) = 4.97, p = .03, $\eta_p^2 = .07$ (see Figure 6.7, below). Simple main effects revealed that when surveillance was low, there was a significant difference in how the School was perceived, according to level of threat, F(1, 67) = 9.31, p < .01, $\eta_p^2 = .12$. Here, the School was seen as acting more for students' interests when threat was also low, and therefore matched (M = 5.54, SD = 1.05), rather than when it was high (M = 4.63, SD = 1.14). However, there was no significant difference in perceptions of the School's intentions when surveillance was high, F(1, 67) = 0.02, p = .90, $\eta_p^2 < .01$,

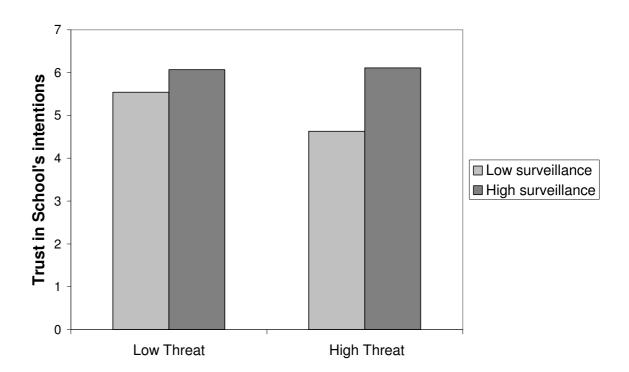


Figure 6.7 The effects of level of threat and level of surveillance on trust in the School's intentions

ns. Here we would have expected that the School would have been seen as acting more for students' interests when threat was high rather than low. Instead, there appeared to be a ceiling effect, with both high surveillance conditions rating the School's intentions at over 6 on a 7-point scale. It seems participants assumed that the School could only be imposing the high surveillance with their best interests in mind, even if the evidence seems to suggest it is not necessary. Simple main effects also showed that when threat was high, there was a significant difference in how the School's intentioned were perceived, depending on level of surveillance, F(1, 67)=24.46, p < .01, $\eta_{p^2} = .27$. The School was seen as acting more in students' interests when surveillance was high (M = 6.11, SD = 0.59)as opposed to low (M = 4.63, SD)= 1.14). This was in line with predictions. However, and against predictions, a trend was observed across the low threat conditions, F(1, 67) = 3.04, p = .086, $\eta_0^2 = .04$, whereby participants saw the School as acting in students' best interests marginally more when surveillance was high (M = 6.07, SD = 0.69) rather than low (M = 5.54,SD = 1.05).

Due to the lack of significant effects on identification and privacy infringement, and findings inconsistent with predictions, the predicted mediational patterns were not tested.

Discussion

Study 6.2 presents an intriguing pattern of results. Of course, we cannot draw too many conclusions from the null effects, but these can perhaps be explained to some extent by the unexpected results found on the other variables. With regard to the acceptability of surveillance, there was an interaction between level of threat and level of surveillance – but the pattern did not correspond to what was predicted. When surveillance was low, it was more acceptable if threat was also

low, as opposed to high, as predicted. However, across the high surveillance conditions, there was no effect of level of threat. When considering the high threat conditions, we see that surveillance was more acceptable when it was also high, rather than low – but again, there are no differences across low threat conditions. It seems that low surveillance is more acceptable when threat is low, and high surveillance is more acceptable when threat is high, but there are no negative effects of imposing high surveillance when threat is low. Surveillance is only perceived as a problem when threat is high and surveillance is low.

In line with these unexpected results, we also found that participants felt the surveillance was being used to ensure the safety of in-group members more when it was high rather than low. The picture that emerges suggests that participants were less willing to condone surveillance that was too low compared to the level of threat; however, they were happy to accept high surveillance regardless of the level of threat.

This interpretation is supported by the findings about level of trust in the School's intentions. Across the low surveillance conditions, participants reported more trust when threat was low rather than high; but there were no significant differences across the high surveillance conditions. When threat was high, high surveillance led to greater trust than low surveillance, and the same trend was apparent across the low surveillance conditions. Some potential explanations for these unexpected results are discussed below.

General Discussion

Study 6.1 showed evidence for a direct effect of the level of threat present in the environment on evaluations of surveillance. Under conditions of high threat, participants viewed surveillance as less invasive, more necessary, and as having a

more legitimate crime-prevention motive than when threat was low. In contrast to hypotheses, identification was not affected by threat and thus did not mediate the direct effect of threat on appraisals of purpose.

The effects found on evaluations of surveillance are consistent with Research Question 9 and in keeping with previous research suggesting that surveillance will be supported if it aims to effectively protect people (Fischhoff et al., 1978; Sanquist et al., 2008) or if people consider that they have a need for it (Dinev et al., 2008). Note that, in this study we did not measure how effective surveillance was seen to be, but we argue that this previous research suggests people are willing to condone surveillance on the basis of their need for safety.

The Study 6.1 results were also in line with those of our own previous research. In our earlier studies, we found that surveillance which is seen to be beneficial to the in-group is viewed more positively (in line with RQ 4: Chapter 2, O'Donnell et al., 2010; Chapter 3, O'Donnell et al., in press). Study 6.1 shows that surveillance that is necessary for the prevention of bad behaviour, and therefore the in-group's protection, receives more support than surveillance which seems unnecessary.

This study also built on our own and other earlier findings by elaborating the process by which a feature of the social context (i.e., threat) affects perceptions of surveillance. We can see from Study 6.1 that threat affects the appraisal of what surveillance is being used for — that is, whether or not it is being used for protection. In turn, this appraisal of the purpose of surveillance underlies the effect of threat on how necessary surveillance is perceived to be. The necessity of surveillance then informs our judgments of how invasive surveillance is. These effects are complementary to those presented in the last chapter, where we showed

that framing surveillance as targeting the out-group led to greater trust in the implementers of surveillance and a greater perception that surveillance was being used to protect the in-group, which resulted in more positive views of surveillance, including higher necessity and acceptability, and lower invasiveness. Thus, the findings suggest, in combination, that our impression of what surveillance is being used for is key in informing our evaluations of surveillance.

Unfortunately, we did not find support for all processes we set out to demonstrate. For instance, there were no effects of threat on identification (related to RQ 10). The non-significant effect on identification was unexpected in light of previous literature showing that threat from an out-group increases in-group identification (e.g., Greenberg et al., 1986; Moskalenko et al., 2006; Stott & Drury, 2000).

Aside from the issue of identification, the results of Study 6.2 seemed to suggest that participants were on the whole rather preoccupied with their protection, and their only concern arose when this was not considered adequately. This finding is not in line with the results from Study 6.1, where participants did not respond as favourably towards surveillance being imposed in conditions of low threat. However, it was clear that the process was as expected. That is, participants who felt they could trust the implementers of surveillance also viewed surveillance as protecting the in-group, and saw it as more acceptable. Thus, although the means were not as expected across conditions, the pattern of results across purpose, trust, and acceptability were consistent with one another. The fact that we have consistent (albeit unexpected) results on several variables in Study 6.2 suggests that participants reacted differently to our manipulations than expected. If we compare the study design to that of Study 6.1, we can perhaps shed some light on the discrepancy.

First, participants may have been more trusting of the imposition of high surveillance in this study because the source of surveillance in this case was the participants' own School at the university. This source was much more specific than that of Study 6.1. In fact, the source was not specified as such in Study 6.1, but participants may have inferred that CCTV in Cardiff city centre was controlled by their city council. In any case, the source utilised in Study 6.2 is one that participants interact with on a daily basis, and which they may feel much more invested in — certainly average identification was over five on a seven-point scale for all conditions. In this study, we may therefore have chosen an in-group that was too caring, such that participants always assumed high surveillance was in their best interests. Based on our previous finding that participants assume surveillance coming from a group they identify with is being used for their benefit and can be viewed more positively, it is perhaps not surprising that we obtained this pattern of results in this study.

The context of the study may also have been problematic because the School is where participants go to study and work. Based on the idea of 'reasonable expectation of privacy' (as discussed in Chapter 1; Nieto et al., 2002), perhaps this is a setting where participants do not feel there is any scope for privacy infringement. We know from our previous research (i.e., Study 3.2; O'Donnell et al., in press) that perceived privacy infringement can vary in workplace settings; thus, if we combine the setting with the rather high identification patterns, we start to understand why we did not observe the predicted effects in this study.

One final explanation for the unexpected findings is that, even in the low threat conditions, participants had the notion of threat salient in their minds due to the surveillance manipulation. It has previously been shown that contextualising questions about CCTV with the idea of fear of crime increases the perceived acceptability of surveillance (Ditton, 1998). Our participants may have felt that if surveillance was being imposed at a high level, it must be necessary and for their benefit. This also fits with our earlier finding in support of Research Question 4; that we assume surveillance is being used for our benefit if it comes from the ingroup (Chapter 2; O'Donnell et al., 2010).

Conclusions

To summarise, taken together, these two studies demonstrate that high threat can lead us to condone the use of surveillance because it is seen as necessary for the protection of the in-group; but also that whatever the level of threat, surveillance coming from a trusted in-group may be interpreted positively (in line with our findings in Chapter 2; O'Donnell, Jetten, & Ryan, 2010). The implication is that people may not be willing to reconsider the intentions of fellow in-group members (and therefore retract their trust) unless it is clear that they are not acting in the interests of the group (as in Chapter 3; O'Donnell, Jetten, & Ryan, in press). In conclusion, it may be that people are not only willing to give up their privacy for temporary safety; they may actually perceive their privacy to be less invaded when they consider that surveillance is necessary. Furthermore, under conditions where privacy does not seem so important, people may be so trusting of the source of surveillance that they do not even question the need when assessing its acceptability.

CHAPTER 7

GENERAL DISCUSSION



"Identity defines the social agent – what we can do and what we want to do depend on who we are." Simon and Oakes (2006, p. 114)

"... human activity can operate as both a product and a producer of social relations." – Stott and Drury (2000, p. 248)

The main objective of the present programme of research has been to provide a social psychological account of how people feel about being under surveillance and how they arrive at their evaluations of it. In contrast to that which has gone before, we have endeavoured to put forward an account that is scientific, theoretically grounded, and practically relevant. The research presented in Chapters 2 to 6 has provided a systematic investigation of factors which are firmly based in theory but also have real-world implications. The overarching *question* of this thesis is encapsulated in the first two research questions that we posed in Chapter 1: 'What

does surveillance mean for individuals, either on their own or as members of social groups?' and 'What factors inform our interpretations of, and reactions to, surveillance?' In this final chapter of the thesis, we aim to evaluate the present research in terms of its ability to answer these questions.

We will first summarise the results presented in relation to the more specific research questions (RQs 3-10), and elaborate on how they can be integrated and collectively understood; before evaluating the research in relation to the two broader research questions (RQs 1 & 2). Next, we will consider some of the inconsistencies and limitations of the research, followed by avenues for future research. Leading on from this, we will comment on the implications of this research, and finally, offer some concluding remarks.

Summary and Integration of Results

As noted elsewhere in this thesis, there is a wealth of research on the effectiveness of surveillance systems in achieving their intended goals (e.g., Davis & Valentine, 2009; Ditton & Short, 1998; Gill & Turbin, 1998; Groombridge, 2008; Lilly, 2006; Skinns, 1998; Welsh & Farrington, 2003). There is also a considerable amount of research investigating the unintended effects of surveillance on those exposed to it: what do people think of it, and how does it make them feel? (e.g., Honess & Charman, 1992; Zweig & Webster, 2002). Some of this research has suggested that to be under surveillance is to *inevitably* have one's privacy infringed upon (Boyle & Haggerty, 2009; Stalder, 2002; Torpey, 2007). We challenged this notion theoretically, and indeed the studies reported in this thesis reveal that the evaluation of surveillance is contextually determined and that perceptions of privacy infringement are dependent on various social factors. As suggested by the

photograph at the outset of the first chapter (and this one), there are several factors that might affect the way in which we view surveillance. How people feel about surveillance should be determined not only by *what it is looking at*, but also by factors such as who imposes the surveillance, one's relationship to them, and the purpose of surveillance that is thereby inferred.

However, as the above quotations suggest, we have further argued that while people's perceptions of surveillance are affected by the social context, surveillance itself should also affect the way they view and interpret the world in which they live. We know from previous research that surveillance seems more fitting in certain social situations and relationships than others (e.g., Reynolds & Platow, 2003). Thus, the use of surveillance may lead people to make certain assumptions about the nature of the relationship between themselves and the surveillor(s), and also inferences about how surveillance is being used and to what ends.

How Identity Affects Surveillance

The first two specific research questions to be addressed in the thesis concerned the ways in which one's identity may impact upon views of surveillance (RQ 3), and how such effects could be driven by people's assumptions about the purpose of surveillance (RQ 4). Our reasoning was based upon research showing that group membership and variables akin to identification can affect responses to surveillance (e.g., Alder, 2001; Oz, Glass, & Behling, 1999; Sanquist, Mahy, & Morris, 2008) and social identity theorising which suggests shared identity can lead people to accept the same behaviour to a greater extent if it comes from within their own group rather than from someone who is not a group member (Hornsey & Imani, 2004; Turner, Wetherell, & Hogg, 1989). These research questions were

tested in Chapter 2, with both a survey study (Study 2.1) and an experimental study (Study 2.2).

The first of these two studies surveyed members of the general public in a city centre setting, to see how their views about being a city resident impacted upon how they viewed the CCTV surveillance in place in the city centre. The results demonstrated that feeling a sense of shared identity or connectedness with the city was associated with a reduced perception that surveillance invaded privacy. Study 2.2 was an empirical study set in a university hall of residence, where we manipulated the identity of those who had requested the CCTV surveillance, and in doing so systematically varied whether or not the identity matched with participants' currently salient social identity. This study replicated the Study 2.1 findings, showing that a sense of shared identity led to a more positive view of surveillance. This provided direct evidence in relation to our third research question. This replication is particularly important as in this study, identity was either shared (or not) with the *source* of surveillance. Hence we can be more confident that it is identifying with the person or group that imposes surveillance which impacts on views of surveillance, rather than just a more positive outlook based on feeling that one is part of a group. Overall, these findings not only support the previous evidence for the importance of group membership in reactions to surveillance, but also provide support for a theoretical perspective which could explain the effects.

In addition, the results of both studies shed light on Research Question 4. It was found that shared identity led people to perceive their privacy as less invaded because they assumed the surveillance was being used to promote the safety of themselves and other group members. This finding was apparent in our

correlational study (Study 2.1), and backed up by the experimental study, which provided more evidence for the causality of these relationships (Study 2.2). The results fit with previous social identity research on criticism, which showed that criticism of the group that came from a fellow group member was only interpreted more positively to the extent that the critic aimed to benefit the group (Hornsey, Oppes, & Svensson, 2002; Hornsey, Trembath, & Gunthorpe, 2004). Similarly, our results suggested that the inferred intention or purpose attributed to the surveillor was as important as, and related to, their group membership. Individuals assumed that surveillors from within the group were motivated to protect their fellow group members. This finding therefore lent support to another body of literature, which suggests that the purpose of surveillance will be important in determining how people respond to it (e.g., Persson & Hansson, 2003; Sætnan, Lomell, & Wiecek, 2004; Stanton & Weiss, 2000; Ullmann-Margalit, 2008).

How Surveillance Affects Identity

The next two research questions aimed to expand on the ideas in Research Questions 3 and 4 by further considering the importance of perceived protection in determining reactions to surveillance. Based on the effects found in the studies presented in Chapter 2, we predicted that if the idea that the in-group leader was implementing surveillance for the benefit of the group was questioned, this would, in turn, undermine the participants' relationship with this leader. Research Questions 5 and 6 were examined in Chapters 3 and 4. Chapter 3 comprised two experimental studies which used workplace scenarios to examine the effect of differing levels of surveillance on perceptions of leaders as team members (RQ 5; Studies 3.1 & 3.2) and willingness to work for the group (RQ 6; Study 3.2). The latter measure was included because prior research suggests that engaging in

discretionary group-benefiting behaviours is strongly associated with shared social identity, so it is a measure of participants' relationship and attitude towards their group (e.g., Jetten, Branscombe, Spears, & McKimmie, 2003; Levine, Prosser, Evans, & Reicher, 2005; van Dick, Grojean, Christ, & Wieseke, 2006; van Dick, Hirst, Grojean, & Wieseke, 2007). Surveillance was described as being at either a low or high level. We portrayed the relationship between employees as either 'groupy', with the leader included, and people feeling a sense of shared identity and working towards common goals, or very individualistic, with the leader seen as quite separate and everyone working rather separately.

Results for both Study 3.1 and 3.2 showed that when identity was shared but surveillance was high, participants felt their leader was less of a group member and they were less willing to work on behalf of the group, compared to when surveillance was low. In fact, their perceptions of the leader and their willingness to work for the group were reduced to a level comparable with that when identity was not shared. This drop was partially explained by privacy invasion perceptions: when identity was shared but surveillance was high, people felt their privacy had been infringed upon. Thus, it seems that when a fellow in-group member imposes surveillance which does not appear to benefit that group, there is a sense that they are "spying" on fellow group members, and this leads to an altered view of the implementer, and reduced commitment to the group.

Chapter 4 reported a behavioural laboratory study (Study 4) that involved a performance task and an opportunity to 'go the extra mile', examining Research Question 6. Participants were made aware that their identity was either shared between themselves and the experimenter, or not. While participants completed the performance task, we imposed either high or low surveillance, making them believe

we were monitoring their behaviour. Again, we measured the level of extra help participants gave the experimenter, as an indication of how they felt about the leader and the group when surveillance was imposed.

The results of Study 4 complemented and built upon those of Studies 3.1 and 3.2, by providing behavioural evidence that people will offer less help to a fellow group member who has imposed high surveillance on them. We argue that this is because such a high level of surveillance is seen as unnecessary and therefore suspicious, as it is not perceived to benefit group members. Importantly, Study 4 also showed that there is a discrepancy between the effects of surveillance on ascribed and non-ascribed tasks: surveillance may make people more productive on the tasks they are required to do, but it also renders them less likely to go above and beyond their job descriptions and help leaders with whom they originally thought they shared identity. Furthermore, even increased productivity on ascribed tasks may be negative in that higher productivity was found to lead to lower quality work.

The evidence provided by Studies 3.1, 3.2 and 4 provides evidence regarding Research Questions 5 and 6 and also advances the understanding of responses to surveillance that we gained from the studies in Chapter 2. These studies reinforce the notion that the intended protection we infer from fellow group members is vital to the increased positive evaluations of surveillance (i.e., in line with Chapter 2 – more evidence regarding RQ 4). They also offer a more nuanced, theoretically grounded account of how people feel about surveillance (and why) than much of the previous surveillance research. Finally, these studies advance the social identity literature by suggesting that group members who fail to act in line with the group's

identity or with what is best for the group will cease to be influential, and thereby demonstrate a boundary to the effects of shared identity.

The Framing of Surveillance

In addition to the importance of the implied purpose in evaluating surveillance coming from within the in-group (Studies 2.1, 2.2, 3.1, 3.2, & 4) we aimed to show more directly that varying the target, and therefore purpose, of surveillance could affect how it was interpreted (RQ 7). This relationship has been suggested in previous research (e.g., Persson & Hansson, 2003; Stanton & Weiss, 2000; Ullmann-Margalit, 2008), but so far, causality has not been demonstrated. Furthermore, we also examined whether framing surveillance as targeting the outgroup for the purpose of benefiting the in-group would lead people to identify more strongly with their in-group, and that this increased identification would underlie the effect of framing on how surveillance was perceived (RQ 8). These questions were addressed in Chapter 5, where we framed surveillance so that it either targeted the in-group, or targeted the out-group for the protection of the in-group. This design was used in three studies, set in an airport (Study 5.1), a city centre (Study 5.2), and a nightclub (Study 5.3). Both Studies 5.1 and 5.2 informed Research Question 7. We found that framing surveillance as targeting one's own group enhanced perceptions that surveillance was invasive, and reduced how acceptable and necessary it was perceived to be, compared to when it was framed as targeting another group. However, no support was found for hypotheses based on Research Question 8, and Study 5.3 did not support any of our predictions.

Despite these mixed findings, we argue that these studies provide important insights. They reveal that it is important to know who surveillance is targeting and why. This is because information about the target and purpose of surveillance helps

to explain why identity impacts on reactions to surveillance (as in Studies 2.1, 2.2, & 3.1), and also because it is important information in its own right. Thus, information about the target and purpose of surveillance is key to the interpretation of surveillance, and identification with the implementers of surveillance is important because it gives a certain impression of what the target and purpose of surveillance might be. Shared identity makes us more trusting of fellow group members (Jetten, Duck, Terry, & O'Brien, 2002; Tanis & Postmes, 2005) and more accepting of that which the in-group proposes (Hornsey & Imani, 2004), but it is because we assume their purpose is benign and their target is elsewhere that we feel this way. These studies therefore shed additional light on Research Questions 3, 4, 5, and 6.

Part of our reasoning regarding the undermining effect demonstrated in Chapters 3 and 4 (relating to RQs 5 & 6) was that high surveillance could not feasibly be seen as being used to benefit group members because it was not necessary to protect them to such a degree. These predictions were also clearly linked to our previous finding that surveillance is viewed more positively if it is used to benefit the in-group (RQs 3-8: Chapter 2, O'Donnell, Jetten, & Ryan, 2010; Chapter 3, O'Donnell, Jetten, & Ryan, in press; Chapter 5). In addition, we draw on previous research which suggests surveillance will be evaluated more positively if we have need of it and, therefore, that it will be seen more negatively if it is not necessary (see Fischhoff, Slovic, Lichtenstein, Read, & Combs, 1978; Sanquist et al., 2008).

In these final studies, we were interested in whether perceptions of surveillance would be directly affected by the knowledge that surveillance was needed to protect the in-group. Therefore, in Research Question 9, we endeavoured to test the effect of *threat to the in-group* upon people's views of surveillance, in order to directly demonstrate the importance of the perceived necessity of surveillance in our evaluations.

Based on previous evidence that threat to the in-group causes increased identification (Tajfel & Turner, 1979; see also Greenberg, Pyszczynski, & Solomon, 1986) and our evidence that identification leads to more positive evaluations of surveillance (e.g., Chapter 2), we reasoned that identification would underlie the impact that threat has on reactions to surveillance (RQ 10). These questions were addressed by two studies in Chapter 6. Study 6.1 investigated the reaction of members of the general public to CCTV surveillance in their city centre. We aimed to examine whether views of surveillance would alter depending on whether there was a high threat of violent crime or not. Study 6.2, in a university department setting, varied both how much threat there seemed to be, and how much surveillance was in use. Our prediction was that surveillance would be viewed most positively when it was implemented at a level most appropriate to the threat in the social context.

As with the studies in Chapter 5, relating to Research Questions 7 and 8, we obtained mixed support for our hypotheses relating to Research Questions 9 and 10. Study 6.1 provided support for predictions relating to Research Question 9 but not Research Question 10: when individuals were under high threat (compared to low threat), surveillance was perceived as serving a legitimate crime-prevention purpose, and therefore as more necessary and less invasive. Moreover, when surveillance was seen as necessary it was also seen as less privacy invading. These findings go beyond previous research findings, which, for example, merely suggest that the need for surveillance will improve perceptions of it (Dinev, Hart, & Mullen,

2008). In particular, we showed that features of the broader social context, such as threat, affect how necessary surveillance seems to be, and that this can lead people to view it as less invasive. If people believe they need protection, they are willing to forgo some degree of privacy.

In Study 6.2, we varied both level of threat and level of surveillance, with the expectation that surveillance would be evaluated most positively when it matched the social context. Contrary to these predictions, participants were most accepting of surveillance when it was high, regardless of the level of threat. However, as discussed in the Chapter 6 Discussion, the overall relationship between the variables still fit our expectations in that participants who saw surveillance as acceptable also trusted in the source's intentions and thought that the surveillance was being used to protect their group. It is just that participants seemed unwilling to believe that their group did not require protection, even when we manipulated threat to be low.

Unfortunately, the predictions related to our final research question were not supported by the studies reported in Chapter 6. We had anticipated that the perception that the in-group needed protection from an external threat would lead to increased identification, which would, in turn, drive more positive views of surveillance. However, different levels of threat did not impact on people's identification.

A Systematic and Psychological Approach

As noted above, at the most general level this thesis sought to provide a social psychological analysis of surveillance by investigating how people feel about being under surveillance. We aimed to examine how such feelings impact upon individuals' evaluations of surveillance and its imposers, and their own behaviour

(related to RQ 1); and to do this by discovering the factors that influence their interpretations of surveillance (related to RQ 2). Empirical evidence was presented in this thesis demonstrating that shared group membership leads to more positive views of surveillance, but only to the extent that the surveillance is being used to benefit the in-group. When it is not used to benefit the group, this impacts negatively not only on views of surveillance, but also on perceptions of those who impose it, and on people's willingness to work on behalf of those implementers and their groups. Finally, we have shown how views of surveillance are directly affected by factors related to whether or not surveillance is being used to benefit the group; such as its purpose, who it targets, and whether threat renders it necessary for the group's protection.

We have addressed Research Question 1 throughout this body of work by taking as our focus the perceptions, attitudes, and behaviours of ordinary people. One of the most fundamental claims of the social identity approach is that groups and our affiliation with them are vital in determining our interactions with other people and things in our social worlds. In the present research, we assessed the way group membership and identification affect outcomes such as perceptions, attitudes, and behaviours. More specifically, we were interested in *how people felt* about surveillance, and how it thus affected their own behaviour. These are aspects that were missing from, or simply not the focus of, much earlier research, such as that conducted by sociologists. On a related note, each study presented here has been concerned with investigating *factors that affect* how people perceive surveillance. As a result, and as intended, we have addressed Research Question 2 throughout the thesis. We set out to provide an account of reactions to surveillance that was social psychological and indeed scientific. As such, our focus was at the level of people's

perceptions of surveillance, of its imposers, and of their groups; people's attitudes towards surveillance, such as degree of acceptance; and people's own behaviours, both intended and actual.

Our research builds upon a limited body of prior work which suggests that factors such as the purpose of surveillance and the individual's group membership may affect how surveillance is interpreted. Its contribution to the literature lies in the fact that it is based on systematic, theoretically-grounded arguments for why this should be the case, and also because it provides empirical support for its claims. We demonstrate that when surveillance comes from one's own group and can be seen as benefiting that in-group, it is seen in a more positive light. Thus, the relationship between levels of surveillance and perceiving one's privacy as being invaded (and other negative outcomes) is neither straightforward, static, nor inevitable. Rather, it is complex, dynamic, and closely related to the perceived purpose of surveillance. Furthermore, this research advances on previous work because it is concerned not only with how social contextual factors impact upon views of surveillance; but also with how the use of surveillance influences people's view of its implementers, social relations with them, and intra-group relations more generally.

Inconsistencies and Unexpected Results

Although many of the findings reported in this thesis were as expected and were consistent both with theory and with one another, there were several unexpected and inconsistent results in Chapters 5 and 6, as briefly highlighted above. Overall, we suggest that the lack of support for the predicted effects is likely to have resulted from methodological issues rather than theoretical ones. Here we

will consider these inconsistencies and surprising findings in more detail, and try to account for them.

First, we had expected that the framing of target and purpose, and the level of threat, would both affect people's degree of identification – and that this would then impact upon their perceptions of surveillance (RQs 8 & 10). However, there was no evidence that identification varied depending on either framing or threat level, or that it affected how individuals perceived surveillance. There was some evidence that participants' *trust* in the implementers was affected by the framing of target and purpose of surveillance, or by the degree of fit between the level of threat and the level of surveillance, and also that it affected their view of surveillance (see Study 5.2 & Study 6.2), but our hypotheses concerning identification were not supported.

We suggest that the problem perhaps lies in the way in which we measured identification, and more specifically, the groups which we used. In three of the studies we measured identification with one's city or national group (Studies 5.1, 5.2, & 6.1). In hindsight, we suggest that these groups may have been too broad and not clearly identified as the *source* of surveillance— and indeed, in all cases they were also the group under surveillance. In an attempt to rectify this problem, in the final studies of both chapters, we used a university-based identity instead. Again, while these groups were similar to identities we had used successfully in the past (e.g., Study 2.2) here they were problematic, because identification was extremely high and so allowed for little variation.

In addition to the unexpected findings regarding identification, there were also some results that were not only unexpected but also inconsistent with other results we obtained. The two major inconsistent results concern the failure of Study

5.3 to replicate the findings of Studies 5.1 and 5.2 that the target and purpose of surveillance can impact on how surveillance is viewed; and the failure of Study 6.2 to produce results in line with those of Study 6.1, which demonstrated that the presence of high threat in the environment can lead people to view surveillance more positively, but that low threat should cause it to be seen negatively.

We argue that the discrepancy between the studies in each chapter may be due to the study designs. Both Studies 5.3 and 6.2 involved a particularly *public* setting, which may have contributed to the lack of expected effects. For example, the studies cited in Chapters 2 and 3 were also set in more semi-private settings, such as residences and offices. A nightclub and a university department are much more public, and hence may be associated with less of an 'expectation of privacy' (see Nieto, Johnston-Dodds, & Simmons, 2002; Steeves & Piñero, 2008).

Furthermore, we argue that the combination of a public setting and a valued and trustworthy source of surveillance (as discussed above) may have led to the inconsistent results in Chapters 5 and 6. Nonetheless, the inconsistencies discussed here betrayed certain limitations to the current research, and suggest some avenues for future research. In the next section, we discuss these and several other possible future directions.

Limitations and Future Directions

The research presented in this thesis represents an advance on previous surveillance literature which does not adequately explain how people experience and react to surveillance, or why. It also builds up our understanding of social identity processes that affect how we respond to behaviour from in-group members that impacts on the group. However, we believe that the social identity

analysis of surveillance provided by this thesis is only in its early stages of development. There are many potential future directions for this research to take. Here, we highlight a few possibilities – based partly on the shortcomings of the present research, and partly on issues that the research has identified as interesting but which we have not had the time or space to cover here.

The work reported in Chapters 5 and 6 provided interesting and valuable evidence for some of our predictions. Unfortunately, as detailed above, they did not support our hypotheses regarding the role of identification as a mediator of the effects of target/purpose, and threat. As already discussed, we have theories about why these predictions were not supported, such as the fact that the studies were set in wholly public settings where there may be no expectations of privacy, and featured surveillance from a source that participants were likely to trust and identify with very strongly. Now that we have these insights, we believe that a follow up study could prove to be fruitful. Clearly, the future research could make use of the information we have gleaned from our current work. For example, it could recruit a broad sample of the general public to answer questions about CCTV in place at their local swimming pool's changing area, a place where there is a higher expectation of privacy, put in place by the management, a group that is easily identifiable and that people are unlikely to already identify highly with. In addition to measuring how invasive, acceptable, and necessary the surveillance was seen to be, we would measure identification both with the specific imposers of surveillance, and the group affected by the surveillance (i.e., pool users) in order to more carefully map the process at work.

It is also appropriate here to highlight shortcomings of the present research that, if resolved, would make our conclusions stronger. We note that the

surveillance manipulations we used in many of the studies in this thesis were rather strong. This is not necessarily a problem when by 'strong' we mean that the manipulation is extreme but clean. An example of this is seen in Study 4, where the manipulation is very overt but it is purely the level of surveillance that is being manipulated. Indeed, manipulations that are strong in this sense can be seen as valuable as they are more likely to be effective. However, we must acknowledge that in our later studies, such as those appearing in Chapters 5 and 6, the manipulations were 'strong' in that they tended to go beyond manipulating just one aspect of surveillance; and that in the attempt to produce effective manipulations, some of them could be seen as confounded. For example, in Chapter 5, all studies manipulated the target and purpose of surveillance. Now, clearly this is referred to in the write up — but had we restricted ourselves to manipulating purely the target of surveillance, the conclusions we could have drawn from this would have been much stronger than they are at present. We do not consider that this invalidates the current research, but note it as something to be considered in follow-up research.

As well as inviting attempts to improve upon the current research, some of our findings which are interesting in themselves point towards exciting new lines of enquiry. For example, it could be fruitful to investigate more comprehensively the role of trust in the process by which people come to their evaluations of surveillance – particularly the notion that feeling one is not trusted (because of being surveilled) leads one to not trust the implementers in return. While this is hinted at in one of our studies (Study 5.2), we have not looked at it closely enough to determine whether or not this is the process at work here. Both theoretically and in practice, mutual trust seems to be an important part of the process by which surveillance is either taken to be beneficial to the group and therefore viewed

positively, or taken to be targeting the group and therefore seen as negative (see Hornsey et al., 2004; Tanis & Postmes, 2005). However, clearer evidence of this process would illuminate our understanding of the undermining effect we have demonstrated.

Similarly, we suggest that it is important to build upon the research we have reported here by investigating further whether (high) surveillance actually goes against what people *expect* from their group. Based on prior theorising that surveillance is not fitting in situations of shared identity, we have assumed that imposing surveillance causes a backlash against in-group leaders because it seems that they have violated some expectation or norm for how group members will behave. Indeed, this is entirely in keeping with our findings. However, it order to strengthen our arguments, it would be valuable to demonstrate empirically that there is a norm within the group that is then violated by the imposition of surveillance. In showing this, future research should further elaborate our understanding of the processes at work when people impose surveillance on their fellow in-group members — and potentially show that if surveillance is seen as in keeping with group norms, there will be no backlash effect.

We have established that imposing surveillance, especially where identity is shared, can undermine the notion that the implementer is part of the group, and can impact negatively on discretionary helping behaviours. In Studies 3.1 and 3.2, this helping behaviour was operationalised as "willingness to work for the group", whereas in Study 4, it was actually helping behaviour towards the implementer of surveillance (the leader). However in both cases the leader benefited from the discretionary behaviour. It would be worthwhile to further investigate whether people are willing to help *other* group members (i.e., not the leader), or whether

helping in general would decrease. Either finding would have important implications. If people were willing to help others in their group, it would suggest that only their relationship with the leader had been undermined by surveillance and that their behaviour represented an angry backlash towards this individual. However, if the effect were more generalised, it could indicate that the intra-group dynamics themselves had been fundamentally damaged.

Thus, in order to test whether it is an individual backlash or a general undermining of shared group identity – or indeed the circumstances in which each process is more likely to happen – it would be important to determine *who* participants were willing (or not willing) to help. In order to disentangle the process at play, the research could measure variables such as feeling shocked, hurt, or betrayed by the use of surveillance (which links to trust as discussed above), and items relating to the need to help other in-group members when surveillance is and is not in place.

In any case, if surveillance leads to less helping of all fellow group members, this would have important social responsibility consequences which could affect groups and communities at large. It has already been demonstrated that the presence of visual surveillance systems makes people less likely to help each other (Dixon, Levine, & McAuley, 2003). Dixon and colleagues suggest that this is because people think it is less necessary to help one another when surveillance is in place. We argue that the effect may also be due to people feeling betrayed and invaded by the surveillance, and this may in turn undermine a sense of group membership. Indeed, this would be in line with our previous process findings (e.g., Chapter 3; O'Donnell, Jetten, & Ryan, in press).

Implications of the Current Research

Although, as with any research, there have been limitations to the work presented here, this thesis has presented findings with some important implications, both for theory and in terms of applied value. Some of these will have been identified throughout the chapters of the thesis. However, in this section we will pull these ideas together and consider the implications of the programme of research as a whole. We will first discuss the theoretical implications, followed by the importance of this research in practical terms.

Theoretical Implications

The research we have presented here has theoretical implications both for the literature on surveillance, and that on social identity. The previous literature on surveillance was largely bifurcated, as much of it reported either that surveillance was viewed very positively and widely accepted (Davies, 1998; Dixon et al., 2003; Honess & Charman, 1992), or that it was inevitably an invasion of privacy and frequently rejected (Stalder, 2002; Stanton & Stam, 2003; Torpey, 2007; Zweig & Webster, 2002). A small body of research had previously investigated factors influencing how people see surveillance, and had identified the importance of the assumed target or purpose of surveillance (Friedman, Kahn, Hagman, Severson, & Gill, 2006; Stanton & Weiss, 2000; Ullmann-Margalit, 2008), the group membership of those watching and those being watched (Oz et al., 1999; Spitzmüller & Stanton, 2006), and how much surveillance appeared to help or protect them (i.e., its degree of effectiveness; Sanquist et al., 2008; Slobogin, 2007). However, this research was disjointed and lacked a unified theoretical perspective.

We have attempted to achieve, with the present research, an integrated, theoretically-grounded account of a number of factors that affect how we see

surveillance, and, importantly, how these factors are *related* to one another. We embarked on the programme of research with an interest in applying the social identity approach to surveillance; and in doing so discovered and developed the relationship between group membership and identification with the source of surveillance, and the importance of the purpose of surveillance. Purpose was identified in the literature as a factor affecting people's views of surveillance, but it was not presented within a theoretical explanation of the reason for the effect. Similarly, as it became clear that surveillance was evaluated more positively to the degree that it appeared to benefit one's own group, we developed a line of research looking at how such perceptions were affected by who surveillance targets, or how much surveillance is needed due to threat in the environment.

In terms of the surveillance literature, then, the main implication of this research is that we have pulled together the ideas and findings of much previous research, and have shown how it is possible to integrate them. That is, for the first time, we offer an account that explains why previous research obtained such mixed findings. Previously, few had considered the notion that surveillance was sometimes viewed negatively and sometimes positively. By acknowledging and investigating this fact, we were advancing on extant literature. In doing so, we were able to systematically investigate several inter-related factors that affect how surveillance is interpreted and thus evaluated, and provide empirical evidence for the *process* by which these factors affect our perceptions of surveillance.

Another implication for the surveillance literature is that we must focus upon the *process* at work if we wish to understand the *effect*. As a consequence of the work presented in this thesis, it should be clear that future research needs to consider factors such as who the implementer is, what their intention seems to be,

and how necessary the surveillance appears; or risk obtaining results that are difficult to interpret and which miss out many of the nuances that could possibly be detected. We also hope that future research in this area can build upon what we have presented here by investigating theoretically relevant factors that may further influence how people react to surveillance. In this way, we can move forward from both the research that failed to consider features that affect how surveillance is seen, and research that identified isolated factors with little theoretical basis.

In addition to advancing the field of surveillance research, the work presented in this thesis has important implications for the social identity approach. Our research provided support for identity-based influence processes (Chapter 2; O'Donnell et al., 2010). This is a field with a large body of existing evidence, but this is the first research that we are aware of which examines how shared social identity can influence people to evaluate surveillance more positively. We believe our research builds upon previous research into influence, such as the work of Hornsey and colleagues regarding reactions to criticism from within the in-group (e.g., Hornsey & Imani, 2004; Hornsey et al., 2002; Hornsey et al., 2004). The implication for this theoretical perspective of both these programmes of research is that social identity can impact on people's attitudes towards real social issues – and also their behaviour.

The present research also provides additional support for the notion that group members need to act in line with the group identity and what is best for the group, in order to be influential (e.g., Reicher & Hopkins, 2003; Turner et al., 1989). Moreover, we have extended this idea by demonstrating that the violation of this notion results in the person being seen as less of a group member, and also that it impacts on how much other group members are willing to help the group in

general (Chapter 3; O'Donnell et al., in press) and that person in particular (Chapter 4; O'Donnell, Ryan, & Jetten, 2009). One implication for the social identity approach is thus that there are limits to how much, and under what circumstances, a sense of shared identity can affect our interpretation of our social world. Future research must therefore recognise the potential limits to the impact that shared identity can have. Our intention is not to undermine the importance of this theoretical approach, but simply to contribute to the understanding of interand intra-group dynamics. In addition, we have supported the notion that identity is not static but is itself affected by behaviour and social context.

By investigating the various factors that influence our interpretation of surveillance, and by including a variety of measures designed to tap into distinct, but theoretically related, concepts (such as privacy invasion, acceptability of surveillance, perceived purpose of surveillance, and trust in implementers) we have also elaborated the process by which identity affects perceptions of surveillance, and vice versa, the process by which perceptions of surveillance affect identity. This is important for the social identity literature, as well as the surveillance literature, because it elucidates what it is about a sense of shared identity that leads us to see surveillance more positively when it comes from the in-group. Accordingly, this allows us to understand what it might be about certain types of surveillance that undermines the sense of identity that was present in the first place. Beyond looking directly at surveillance, this is relevant to the social identity literature in general because it shows us the kinds of facets that contribute to our understanding of a shared group identity; features such as an assumption of consensus, and trust and care between group members. These ideas are not new (Tanis & Postmes, 2005; Turner, 1987c), but it is valuable nonetheless to have

gained empirical support for ideas that form the basis for the social identity approach.

Finally, as well as adding to two distinct bodies of literature, this thesis has important theoretical implications simply because it brings these literatures together. It is true that others have noted the value of applying the social identity approach to surveillance (e.g., Levine, 2000), and have spoken of the importance of identity processes with relation to surveillance (i.e., the SIDE approach; Reicher, Levine, & Gordijn, 1998; Reicher, Spears, & Postmes, 1995). However, this is one of the first programmes of research to extensively investigate how a social identity perspective may illuminate our understanding of how people react to being under surveillance. In this way, it paves the way for a wealth of additional research in this new field. Along with the practical implications of the research, to be discussed below, this will lead us into assessing the contribution of this thesis.

Practical Implications

As noted in Chapter 1, the UK is subject to ubiquitous and ever-expanding surveillance in both public settings (Botan, 1996; Lyon, 2001a) and workplaces (Blakemore, 2005; Schmitz, 2005). Reactions to this extensive use of surveillance are mixed (Allen, Walker, Coopman, & Hart, 2007; Sewell & Barker, 2001, 2006), with some people viewing it very negatively (see Davies, 1998; Zweig & Webster, 2002) and others being more accepting (Dixon et al., 2003; Honess & Charman, 1992). Given the high level of surveillance used in the UK (and indeed other western nations, such as the US) and the controversy associated with it, the present research inevitably has some implications that are more practical and applied in nature. In particular, the current research has important implications for those implementing surveillance, whether this refers to a local authority imposing an

open-street CCTV scheme, a university installing cameras in the corridors, or a management team opting to use surveillance equipment in their offices. Our research suggests a sense of shared identity with the source of surveillance can make people view surveillance more positively (Chapter 2; O'Donnell et al., 2010). This suggests that employers or authorities who wish to use surveillance without negative repercussions should ensure that a sense of shared identity between those who are watching and those being watched is apparent.

However, we argue that there is a fine line, and leaders cannot hope to impose whatever level and type of surveillance they wish and have others accept it, simply because they share a sense of common identity with those around them. This is because people are social agents with an awareness of what is going on within the groups they consider themselves a part of. We know that surveillance is only acceptable when coming from the in-group because it is assumed to benefit the in-group (again see Chapter 2, O'Donnell et al., 2010). Leaders who attempt to foster a sense of shared identity but also implement surveillance give the impression that they do not genuinely trust that other people will behave as they are required, and conflate processes of 'power through' with 'power over'. For example, if surveillance is imposed at a high level it is clear to employees that such extensive monitoring is not required to protect them in a relatively secure office environment (Chapter 3, O'Donnell et al., in press). Our research suggests that the relationship between those watching and those being watched is then damaged. Thus, the research offers a warning to those considering implementing surveillance.

This warning extends beyond the impact on how the relationship is perceived; it also applies to the helpful behaviours people are willing to engage in (Chapter 3, O'Donnell et al., in press; Chapter 4, O'Donnell et al., 2009). This

means that in organisations or public settings, people could be less willing to help one another simply because of the surveillance that has been put in place. For example, although surveillance may be put in place to prevent crime or increase performance and may be effective in these goals, it can then undermine people's willingness to help just as it undermines evaluations of the implementers. For this reason the research is important both for social cohesion and also social responsibility.

Overall Contribution

Overall, the research reported in this thesis has important implications for theories of surveillance and theories of inter- and intra-group dynamics; but also has applied value due to its implications for real world social relations and behaviour. By this late point in the thesis, as this final chapter begins to draw to a close, it should be clear that this is not the first time anyone has considered how we react to surveillance, or the factors that might influence this. It is certainly not the first time anyone has investigated how social identity processes affect our perceptions of our social world. It is not even the first time anyone has contemplated the value of applying the latter, a hugely influential theoretical approach, to the former, a fascinating social issue. However, the major novelty and the contribution of this thesis come from the fact that we have chosen to combine an interesting and important social issue, surveillance, with a powerful theoretical perspective, the social identity approach; in a way that is scientific, theoretically grounded, and practical. Each individual aspect of this research project represents an advance on extant research. However, it is the combination of two different fields, and also the combination of three important aims, that has served to produce the overall contribution of this thesis.

Concluding Remarks

The studies and ideas presented in this thesis represent an advance on previous research on reactions to surveillance, because we have acknowledged the fact that surveillance occurs within a given social context. Thus, our reactions to it are based within that context too. We have argued that various factors may determine how people feel about surveillance and respond to being surveilled – most notably, we suggest it is vital to know from whom the surveillance comes, and our relationship to them. From knowing this, we can infer many other things, such as what their intention might be in imposing the surveillance, whether they seek to protect us, and who they aim to target. This thesis has demonstrated not only the importance of all these factors, but also how they interact with one another in determining our reactions to surveillance. However, it has also demonstrated that the social context in which surveillance occurs is not static and given. The context itself can be affected by the use of surveillance; because its use implies a certain social relationship. If this goes against the social relationship that was originally understood to exist, then surveillance can be seen as fundamentally altering the intra-group relationship that was initially in place. Thus, it is not only surveillance that is open to interpretation according to identity and related factors; identity too can be impacted upon by outside factors such as surveillance. In conclusion, the message of this thesis is twofold: first, surveillance is not imposed in a vacuum, and its interpretation will be affected by the social context, including relations between the watcher and the watched. However and perhaps most importantly, we must remember that the context itself is dynamic and can be changed by the imposition of surveillance. When people ask themselves the question "What is it looking at?" and all those other questions that go along with it,

the answer they arrive at may have more wide-reaching consequences than can at first be imagined.

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APPENDICES

Ple	Please answer the following questions.				
1.	Do you live in Exeter?	Yes, all of the time / Yes, part of the time / No			
2.	If yes, for how many years?	years			
3.	If no, how often do you visit?	times a week / month / year			

For each of the following items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box,

Some questions on how you feel about Exeter:

Hov	How much do you agree with each of the following statements?			
1.	I feel a strong sense of belonging to Exeter.			
2.	I feel strong ties with people from Exeter.			
3.	I like the city of Exeter.			

Some questions about CCTV. Please consider the presence of CCTV cameras in EXETER CITY CENTRE when answering these questions.

To	To what extent do you agree with each of the following statements?			
1.	It is acceptable that there is CCTV in use.			
2.	The presence of CCTV cameras is an invasion of my privacy.			
3.	I have little reason to be concerned about my privacy here.			
4.	The fact that there are CCTV cameras makes me feel uneasy.			
5.	I can completely understand why there are CCTV cameras in use.			
6.	I feel like someone is always watching me.			

To what extent are the CCTV cameras targeting each of these people/groups?								
1.	1. You. 5. Homeless people.							
2.	Locals.		6.	Partygoers.				
3.	Students.		7.	Youths.				
4.	Criminals.		8.	Everyone.				

1	2	3	4	5	6	7
= strongly disagree	= disagree	= slightly disagree	= neither agree nor disagree	= slightly agree	= agree	= strongly agree

То	To what extent do CCTV cameras make you feel each of the following things?							
1.	. Protected. 3. Safe.							
2.	Self-conscious.		4.	Relaxed.				
5.	Content.		8.	Guilty.				
6.	Inhibited.		9.	Anxious.				
7.	Watched.		10.	Reassured.				

	To what extent do you think each of the following is the purpose of CCTV cameras?					
1.	For my safety.	5.	To prevent theft.			
2.	For the safety of others.	6.	To prevent misbehaving.			
3.	Because of previous incidents.	7.	To prevent violence.			
4.	To check up on people.					

A new initiative has been proposed whereby various charities would be able to
ask people for a donation towards the placement and maintenance of CCTV
cameras in Exeter City Centre. If this were to happen, how much, between £0-20,
would you be willing to donate as a one-off donation?
_

Who do you think placed the CCTV cameras in Exeter City Centre, and why?				

Some personal information				
Age				
Gender	M / F			

THANKS VERY MUCH FOR YOUR HELP AND COOPERATION!

HOLLAND HALL AND CCTV

We are interested in the views of Holland Hall residents about what it is like to live in Holland Hall, including what they think about CCTV that is present in Holland Hall. We are also conducting research to look at the views of residents of other Halls and University Residences. There are no right or wrong answers; we are just interested in what it's like to live in Holland Hall.

Filling in this questionnaire is entirely voluntary and any information you give us will be anonymous. Filling in the questionnaire is taken to be your consent to taking part in the study.

Firstly, would you please list three things that **you like** about living in Holland Hall?

1.

2.

3.

UNIVERSITY OF EXETER AND CCTV

We are interested in the views of members of the University of Exeter community about what it is like to live in University residences, including what they think about CCTV that is present in University residence. We will also be questioning members of other University communities in the region. There are no right or wrong answers; we are just interested in what it's like to live in University residences.

Filling in this questionnaire is entirely voluntary and any information you give us will be anonymous. Filling in the questionnaire is taken to be your consent to taking part in the study.

Firstly, would you please list three things that **you like** about the University of Exeter?

1.

2.

3.

Background to this research

As you may or may not be aware, there are CCTV cameras in corridors of Holland Hall. These were placed at the request of people living in the Hall. These residents felt strongly about having CCTV in Holland Hall and petitioned the University about it, after which University security was instructed to place the cameras. There are now early plans to install more CCTV cameras in Holland Hall, and so we are interested in how you feel about the CCTV currently in operation.

Background to this research

As you may or may not be aware, there are CCTV cameras in corridors of Holland Hall. These were placed at the request of various groups within the community of the University of Exeter, including staff and students, such as those from other Halls of Residence. These University members felt strongly about having CCTV in Holland Hall and petitioned the University about it, after which University security was instructed to place the cameras. There are now early plans to install more CCTV cameras in Holland Hall, and so we are interested in how you feel about the CCTV currently in operation.

Remember to answer the following questions bearing in the mind the CCTV present in **Holland Hall.**

For each of the items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

То	what extent do you agree with each of the following statements?	
1.	It is acceptable that there is CCTV in use.	
2.	The presence of CCTV cameras is an invasion of my privacy.	
3.	I have little reason to be concerned about my privacy here.	
4.	The fact that there are CCTV cameras makes me feel uneasy.	
5.	I can completely understand why there are CCTV cameras in use.	
6.	I feel like someone is always watching me.	

To	To what extent do CCTV cameras make you feel each of the following things?							
1.	Protected.		3.	Safe.				
2.	Self-conscious.		4.	Relaxed.				
5.	Content.		8.	Guilty.				
6.	6. Inhibited. 9. Anxious.							
7.	Watched.		10.	Reassured.				

To what extent is the CCTV targeting each of these people/groups?		
1.	You.	
2.	Other residents.	
3.	Student visitors.	
4.	Other visitors.	
5.	Staff.	
6.	Intruders.	

	Questionnaire		
То	To what extent do you think each of the following is the purpose of CCTV?		
1.	For our safety.		
2.	For the safety of others.		
3.	To protect the University's interests.		
4.	To check up on people.		
5.	To prevent theft.		
6.	To prevent misbehaving.		
7.	To prevent violence.		
8.	Because of previous incidents.		
Ho	w much do you agree with each of the following statements?		
_			

How much do you agree with each of the following statements?		
1.	I see myself as a Holland Hall resident.	
2.	I am happy to be a member of Holland Hall.	
3.	I feel strong ties with other Holland Hall residents.	

How much do you agree with each of the following statements?		
1.	I see myself as a member of the University of Exeter community.	
2.	I am happy to be a member of the University of Exeter community.	
3.	I feel strong ties with other members of the University of Exeter community.	

A new initiative has been proposed whereby Holland Hall residents would
be asked to make a contribution towards the placement and maintenance
of CCTV cameras in Holland Hall. If this were to happen, how much,
between £0-100, would you be willing to contribute?
<u> </u>
c

Some personal information	
Age	
Gender	M/F

THANKS VERY MUCH FOR YOUR HELP AND COOPERATION!

Unscrambling Sentences

Below are fifteen sentences about work related things. However each sentence has been scrambled up in the wrong order. Please try to unscramble each sentence and write the unscrambled solution underneath the sentence. You will have 5 minutes to do this task and we would like you to unscramble as many as you can in this time. If you get stuck just move on to the next one.

ne. If you get stuck just move on to the next one.
goal group a work my common to together to likes achieve
2. work they group people are of harder part when a
3. good creates team atmosphere a work
4. best team the are workers players
5. important the in efficiency is workplace
6. productive together more makes working you
7. good it challenged to is at be work

8. rewarded should members group be equally
9. part it's to good a be team of
10. focus goals a setting work at provides
11. something give everyone team towards to strive goals
12. are very group rewarding achievements
13. at doing own work reward its well is
14. working best reach solutions together the groups
15.objectives a brings having together team shared

Now, please read the following scenario and imagine that you work in this organisation for the purposes of the questions that follow:

Please imagine that you have got yourself a summer job in a call centre for LogiCom. You work in an office, in a large team of people including management. The general feeling in the office is good, with everyone working hard towards a common goal. There is a good bonus scheme within the company, where everyone is rewarded equally for group achievements, including members of management. This promotes an atmosphere whereby people work together. You really feel like your team is all working for the same objectives.

Unscrambling Sentences

Below are fifteen sentences about work related things. However each sentence has been scrambled up in the wrong order. Please try to unscramble each sentence and write the unscrambled solution underneath the sentence. You will have 5 minutes to do this task and we would like you to unscramble as many as you can in this time. If you get stuck just move on to the next one.

nd we would like you to unscramble as many as you can in this me. If you get stuck just move on to the next one.
1. do like own I my things to way
2. separately from I to colleagues work prefer my
3. methods prefer different different using people
4. you work goals for should at own your strive
5. important the in efficiency is workplace
6. a can working effective be alone strategy very
7. good it challenged to is at be work

8. are individual the rewarding achievements most
9. gives challenge a unaided you working
10. focus goals a setting work at provides
11. work their people goals each own have should at
12. only I myself rely to like on
13. at doing own work reward its well is
14. satisfying is working most the independently
15.alone when work most the you you done get

Now, please read the following scenario and imagine that you work in this organisation for the purposes of the questions that follow:

Please imagine that you have got yourself a summer job in a call centre for LogiCom. You work in an office, in a large team of people including management. The general feeling in the office is good, with everyone working hard towards their individual goals. There is a good bonus scheme within the company, where people are rewarded for individual achievements. Management are subject to a different bonus scheme than other employees. This promotes an atmosphere of individual productivity. This leads to an atmosphere where people work together, but try to achieve first and foremost their own targets and objectives.

Questions on your perceptions of LogiCom

1. Please write down a few behaviours you think are typical in this organisation. For example, what is the atmosphere among colleagues, do they go out for a drink on Friday afternoons, and would it be easy to form friendships?

For each of the items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

To what extent do you agree with each of the following statements?			
2.	In this organisation, I would feel we are working towards a common goal		
3.	In this organisation, we would work best as a team		
4.	In this organisation, we would reach the best solutions together as a group		
5.	In this organisation, it would feel like we were all working towards the same objectives		

Some more information on LogiCom

Please read the following extra information about LogiCom and bear all of the information in mind when answering the rest of the questions:

Management at LogiCom give you a lot of freedom in how you like to organise your work. They are there to offer advice and assistance when needed, but they are very much hands-off as long as the job gets done. There is plenty of room for own initiative and you do not have to get permission from management to engage in activities that are clearly of benefit for the organisation.

At times, there are visits by more senior management to the office. The atmosphere during those visits is usually quite relaxed. In general, you do not feel very closely monitored and there is understanding for the idea that different employees work in different ways.

You are not really supposed to use the internet, printer or photocopier for personal purposes, so management ask that you do not abuse this privilege. However, there is no one checking your use of these resources.

Some more information on LogiCom

Please read the following extra information about LogiCom and bear all of the information in mind when answering the rest of the questions:

Management at LogiCom likes to oversee the work of the other people in the office and frequently come around to check what you are doing. Other than this, regular checks are being made on your activities and a computer system is installed that monitors not only how long you take to deal with clients on the phone, there are also statistics on how long it takes you to do administration, how long you are logged off for coffee breaks, and your client satisfaction scores. Recently CCTV cameras were installed in the office which also enhances the way management can monitor your activities. Every ten minutes a photograph is taken of your work area.

At times, there are visits by more senior management to the office. The atmosphere during those visits is usually quite tense and people feel being checked. In general, you do feel very closely monitored and there is not a lot of understanding for the idea that different employees work in different ways.

You are not really supposed to use the internet, printer or photocopier for personal purposes, and management can monitor your use of these resources constantly.

More questions on your perception of LogiCom:

То	To what extent do you agree with each of the following statements?			
2.	In this organisation, I would feel we were constantly monitored by management			
3.	In this organisation, I would feel I was able to do the work as I see fit			
4.	In this organisation, I would feel constantly accountable to management			
5.	In this organisation, I would constantly feel someone was looking over my shoulder			

QUESTIONNAIRE

For the purposes of the study, please try to bear in mind all the information you have just read and imagine you work at the organisation described.

If you were an employee at this organisation LogiCom, how would you feel and respond?

For each of the items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

	To what extent do you agree with each of the following statements as descriptions of the leadership in your team?			
1.	Leaders in this team would be sensitive to the views of those around them			
2.	Leaders in this team would see themselves as part of a team			
3.	Leaders in this team would operate independently of other employees			

Some personal information			
Age			
Gender	M/F		

THANKS VERY MUCH FOR YOUR HELP AND COOPERATION!

NB Identity manipulations are not given here as they are identical to those for study 3.1.

Some more information on LogiCom

Please read the following extra information about LogiCom and bear all of the information in mind when answering the rest of the questions:

Recently CCTV cameras were installed in the office which enhances the way management can monitor your activities. Every ten minutes a photograph is taken of your work area. There are cameras over the doors, over people's desks, and over the coffee area. In total, there are 65 cameras in the building.

Recently a CCTV camera was installed over the door to the office, but it is the only camera in the building. CCTV in this organisation is kept to a minimum.

More questions on your perception of LogiCom:

То	To what extent do you agree with each of the following statements?		
4	This arganization would use a let of CCTV surveillance		
1.	This organisation would use a lot of CCTV surveillance		
2.	In this organisation, I would feel we were constantly monitored		
3.	In this organisation, I would feel I was able to do the work as I see fit		
4.	In this organisation, I would feel constantly accountable		
5.	In this organisation, I would constantly feel someone was looking over my shoulder		

QUESTIONNAIRE

For the purposes of the study, please try to bear in mind all the information you have just read and imagine you work at the organisation described.

If you were an employee at this organisation LogiCom, how would you feel and respond?

For each of the items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

То	To what extent do you agree with each of the following statements?		
1.	I would feel strong ties with LogiCom		
2.	I would identify with LogiCom		
3.	I would feel a sense of solidarity with other employees in LogiCom		
4.	If it received public criticism, I would defend LogiCom		
5.	I would be proud of LogiCom		

То	To what extent do you agree with each of the following statements?		
1.	Management would believe in my ability to do my job		
2.	My superiors would have faith in my commitment to my job		
3.	I would feel trusted to do my job properly		
4.	I would feel people could depend on me to do my job as expected		

	To what extent would you feel the CCTV cameras were placed for each of the following reasons?				each
1.	For my safety		4.	To make sure people work hard	
2.	For the safety of other employees		5.	To protect the organisation's interests	
3.	To check up on people		6.	To prevent misbehaving	

1	2	3	4	5	6	7
= strongly disagree	= disagree	= slightly disagree	= neither agree nor disagree	= slightly agree	= agree	= strongly agree

	To what extent do you agree with each of the following statements as descriptions of the leadership in your team?		
1.	Leaders in this team would be sensitive to the views of those around them		
2.	Leaders in this team would see themselves as part of a team		
3.	Leaders in this team would operate independently of other employees		
4.	Leaders in this team would be similar to me		
5.	I would identify with leaders in this team		

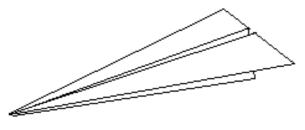
To what extent do you agree with each of the following statements?			
1.	It would be acceptable that there was CCTV in use		
2.	The presence of CCTV cameras would be an invasion of my privacy		
3.	I would have little reason to be concerned about my privacy		
4.	The fact that there were CCTV cameras would make me feel uneasy		
5.	I would completely understand why there were CCTV cameras in use		
6.	I would feel like someone was always watching me		

1 2 3 4 5 6 7
= not at all = neutral = very much

To what extent do you agree with each of the following statements?			
1.	How keen would you be to stay with this organisation?		
2.	How much would you see a future for yourself in this organisation?		
3.	If you saw a problem with the way work was being done, how willing would you be to bring it to your supervisor's attention?		
4.	In your daily work, how willing would you be to do more than is formally required?		
5.	How willing would you be to organise social activities in this organisation?		
6.	How willing would you be to help out new employees?		
7.	How willing would you be to follow instructions given to you by supervisors?		
8.	How willing would you be to help out colleagues who need a hand?		
9.	How willing would you be to attend voluntary work meetings?		
10.	To what extent would you think the organisation's problems were your problems?		
11.	To what extent would you take responsibility for the problems of the organisation?		
12.	To what extent would you think your group's problems were your problems?		
13.	To what extent would you take responsibility for the problems of your group?		

Some personal		
information		
Age		
Gender M / F		

THANKS VERY MUCH FOR YOUR HELP AND COOPERATION!



DART PLANE

You will have 5 minutes to make as many paper aeroplanes as possible, while still maintaining a reasonable level of quality in your aeroplanes!

1. Take an A4 sheet and fold it in half, as in FIG. 1

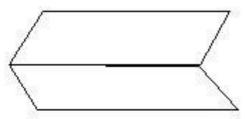


FIG. 1

2. As shown in FIG. 2, fold the short edge of one side down to the first fold you made (i.e., producing a 45 degree angle). Do this for the other side too.

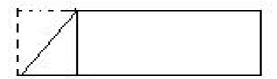


FIG. 2

3. Fold down the new fold you have created to the original fold you did in (1). Repeat for the other side (see FIG. 3).

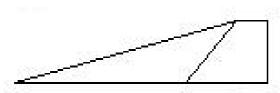


FIG. 3

4. Do (3) again for both sides (see FIG. 4).



FIG. 4

5. Hold centre and open wings out. Your plane is now ready to fly!

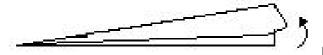


FIG.

Experimenter script:

As you know, you're here participating because as psychology students, you're required to take part in a certain amount of research. I also participated in other people's research when I was in first year, and when you're in third year you'll be running your own studies too. The study is specifically investigating the responses and performance of students compared to staff members. I'm a postgraduate student here in the School – so I guess we can see how well we do, compared to staff members.

The main task you'll be doing in the study today is a practical one, investigating how well you cope under time pressure. We want to see how many paper aeroplanes you can make in five minutes. As I said, we're interested in you as psychology students, and in comparing the performance of our group, psychology students, to that of psychology staff members. There will also be two short questionnaires to fill in, and we'll start with one of these shortly.

Written task:

Would you please list three things that you think distinguish psychology students from psychology staff members that may impact on the task

1.

2.

3.

Experimenter script:

As you know, you're here participating because as first year psychology students, you're required to take part in a certain amount of research. Because I am a postgraduate student here in the school, I'm able to take advantage of this scheme you're participating in to run my studies. The study is specifically investigating the responses and performance of undergraduate students compared to postgraduate students. As I said, I'm a postgraduate student – so I guess we can compare how you do, compared to me and other postgrads.

The main task you'll be doing in the study today is a practical one, investigating how well you cope under time pressure. We want to see how many paper aeroplanes you can make in five minutes. As I said, we're interested in you as psychology students, and in comparing the performance of your group, undergraduate psychology students, to that of psychology postgraduate students. There will also be two short questionnaires to fill in, and we'll start with one of these shortly.

Written task:

Would you please list three things that you think distinguish undergraduate psychology students from postgraduate psychology students that may impact on the task

1.

2.

3.

Scripts:

High surveillance

"While you're doing the paper aeroplane task, I will walk round and I might watch how you work on the task. There is also a camera here at the front recording as you do the task." (experimenter presses button to make camera rotate noisily towards participants, then walks around clearly observing what they are doing throughout the task)

Low surveillance

"While you're doing the paper aeroplane task, I'll go out of the room and leave you to it – I'll probably pop in once during the task." (experimenter leaves the room and peeps round the door halfway through and asks "is everything alright?")

For each of the following items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

1	2	3	4	5	6	7
= strongly disagree	= disagree	= slightly disagree	neither agree nor disagree	= slightly agree	= agree	= strongly agree

То	To what extent do you agree with each of the following statements?		
1.	I felt keen to do well on the paper aeroplane task		
2.	I think performed to a high standard on the task		
3.	I felt pretty comfortable about taking part in this task		
4.	I thought the paper aeroplane task was fun		
5.	I was interested in doing this task		
6.	I put in lots of effort on the paper aeroplane task		

То	what extent do you agree with each of the following statements?	
1.	I think the experimenter trusted me to do well on the task	
2.	The experimenter had faith I would try hard on the task	
3.	I would be keen to help out this experimenter	
4.	I would not offer the experimenter my help	
5.	The experimenter carrying out this research can be trusted	
6.	I cannot rely upon this experimenter	

For each of the following items, please choose a number that best represents the extent to which you felt each emotion, and write it in the corresponding box, where:

	How much did you feel each of the following emotions while doing the aeroplane task?				
1.	Angry.		4.	Relaxed.	
2.	Frustrated.		5.	Privacy was invaded.	
3.	Betrayed.		6.	Comfortable.	

То	To what extent do you agree with each of the following statements?		
1.	I identify with the experimenter		
2.	I see myself as similar to the experimenter		
3.	s. I feel a sense of solidarity with the experimenter		
4.	I feel strong ties with the experimenter		

То	To what extent do you agree with each of the following statements?	
1.	I identify with other psychology students	
2.	I see myself as a psychology student	
3.	. I am glad to be a psychology student	
4.	I feel strong ties with psychology students	

То	To what extent do you agree with each of the following statements?		
1.	During the aeroplane task, I felt under surveillance		
2.	During the aeroplane task, I felt constantly monitored		
3.	I felt able to do the aeroplane task as I saw fit		
4.	During the aeroplane task, I felt accountable		
5.	During the aeroplane task, I felt someone was looking over my shoulder		

And now, just to help me analyse your data, I'd be grateful if you could provide the following details about yourself:

Age	
Gender	M/F

Thank you very much for your help and cooperation

Your	code:
------	-------

Participant suggestion form

The researchers working on this project are having trouble recruiting enough participants – if you know anyone that might be interested in taking part, we ask you to please give their names and email addresses below. It doesn't matter if they are psychology students or not, as we are interested in various different groups of people. They won't be obliged to take part, they would simply be issued with an invitation, and their information would NOT be passed on to any third parties. Thank you!

Name	Email address

Please read the following information and keep it in mind for the purposes of the questions that follow:

From summer 2009, Heathrow airport will be the first UK airport to go through radical changes to the amount and type of security and surveillance measures present in passport control areas. These changes will mean that each passenger entering the UK at Heathrow will be subjected to increased security measures such as:

- Finger printing
- Being photographed
- Increased CCTV surveillance in the passport control area

This will all be in addition to the security procedures that already exist. This kind of procedure is similar to the heightened security measures in place in the USA at the moment. If the trial run goes well at Heathrow, then the new surveillance equipment will gradually be introduced to all British airports.

The reason that these new surveillance measures are being introduced in British airports is that the airport needs to more thoroughly screen certain passengers before they enter Britain, due to a serious problem with illegal immigration. The airport authorities hope that the introduction of these measures will greatly reduce the number of illegal immigrants entering Britain, especially in these troubled economic times when British people need jobs more than ever.

Please read the following information and keep it in mind for the purposes of the questions that follow:

From summer 2009, Heathrow airport will be the first UK airport to go through radical changes to the amount and type of security and surveillance measures present in passport control areas. These changes will mean that each passenger entering the UK at Heathrow will be subjected to increased security measures such as:

- Finger printing
- Being photographed
- Increased CCTV surveillance in the passport control area

This will all be in addition to the security procedures that already exist. This kind of procedure is similar to the heightened security measures in place in the USA at the moment. If the trial run goes well at Heathrow, then the new surveillance equipment will gradually be introduced to all British airports.

The reason that these new surveillance measures are being introduced in British airports is that the airport needs to more thoroughly screen **all** passengers, before they enter Britain. The airport authorities hope that the introduction of these measures will enable more intense and reliable checks to be made on all passengers before they enter Britain.

= sti

Please indicate which of these nationalities you identify as applying most						most
to y	ou:					
Brit	ish 🗌	English	Scottish	Welsh	N. Irish	
For now, we are most interested in how you see yourself as a British						
person.						
	1 strongly lisagree	2 = disagree	3 = slightly disagree	4 = neither agree nor disagree	5 = slightly agree	6 = agree
То	what exte	nt do you agree	with each of	the following st	atements?	
1.	I see myse	elf as British.				
2.	I am pleas	sed to be British				
3.	I feel stror	ng ties with other E	British people.			
4.	I identify w	vith other British pe	eople.			
des	cribed which	ch are to be intro	duced at Heat		easures that we I y other UK airpor ty.	
To	what exte	nt do you agree	with each of	the following st	atements?	
1.	The use o	of these new surve	illance measure	s would be an inva	sion of my privacy.	
2.	I would fee airports.	el comfortable if th	e new surveillar	ice measures were	introduced in	
3.	The fact thuneasy.	nat new surveilland	ce equipment co	uld be introduced i	makes me feel	
4.	-		put in place, I v	vould feel like some	eone was always	
5.			my privacy in ai	rports if the new su	ırveillance was in	
-	• • • • •		111 1 6	Hara Callina Para at		
10 \				the following st		
1.	airports.	·		w surveillance me		
2.	I do not ur introduced		one would want	these surveillance	measures to be	
3.	The introd	luction of these ne	w surveillance n	neasures would be	unfair.	
4.	I think it w	ould be justified if	new surveillance	e equipment were i	ntroduced.	

1	2	3	4	5	6	7
= strongly disagree	= disagree	= slightly disagree	neither agree nor disagree	= slightly agree	= agree	= strongly agree

To what extent do you agree with each of the following statements?				
1.	I trust that the airport authorities have British people's best interests at heart with regard to the new surveillance measures.			
2.	The airport authorities just want to appear to be helping British people.			
3.	The airport authorities want to catch people like me out with the new surveillance.			
4.	I believe that the airport authorities trust British people like me.			

To	To what extent do you agree with each of the following statements?				
1.	The introduction of the new surveillance measures is essential for the smooth running of British airports.				
2.	In order to protect my own and other's safety, the introduction of these new surveillance measures is vital.				
3.	The new surveillance measures will not help in any way.				
4.	It would be unwise not to implement the new surveillance measures in Heathrow and other UK airports.				
5.	The use of these new measures is a basic need in airports such as Heathrow.				
6.	These kinds of surveillance measures are not required in UK airports.				

To what extent do you agree that each of the following is the purpose of the new surveillance measures?					
1.	For my safety.	5.	To prevent illegal immigration.		
2.	For the safety of others.	6.	To prevent misbehaving.		
3.	Because of previous incidents.	7.	To prevent violence.		
4.	To check up on people.	8.	To prevent customs violations.		

1	2	3	4	5	6	7
= not at all			= neutral			= very

	The prospect of the introduction of new surveillance equipment would make me feel					
1.	Protected		5.	Relaxed		
2.	Self-conscious		6.	Guilty		
3.	Reassured		7.	Safe		
4.	Distrusted		8.	Anxious		

Some personal information					
Age					
Gender	Male / Female				

THANK YOU VERY MUCH FOR YOUR TIME, HELP AND COOPERATION!

Please read the following information carefully and keep it in mind for the purposes of the questions that follow:

There are CCTV cameras in operation in Exeter city centre. The level of surveillance is considered to be high, with cameras in operation along all of the main shopping streets and in the majority of shops. Since the CCTV system was introduced crime within the city centre has been significantly reduced, with CCTV directly responsible for the lower number of personal attacks. Imagine that you are walking down the high street and you see the following sign warning you of CCTV being in operation...



Please read the following information carefully and keep it in mind for the purposes of the questions that follow:

There are CCTV cameras in operation in Exeter city centre. The level of surveillance is considered to be high, with cameras in operation along all of the main shopping streets and in the majority of shops. The average person is caught on camera 200 times per day, and recorded video and picture images are held for three months after they have been taken. Imagine that you are walking down the high street and you see the following sign warning you of CCTV being in operation...



As you answer the following questions about the presence of CCTV, please consider the CCTV surveillance in place in Exeter City Centre as described on the previous page and advertised by the sign you just saw.

То	To what extent do you agree with each of the following statements?			
1.	I feel a strong sense of belonging to the city of Exeter.			
2.	I feel strong ties with other people from Exeter.			

To	To what extent do you agree with each of the following statements?				
1.	The use of CCTV cameras in Exeter city centre is an invasion of my privacy.				
2.	I feel comfortable with the level of CCTV surveillance in Exeter city centre.				
3.	The CCTV in Exeter City Centre makes me feel uneasy.				
4.	I feel like someone is always watching me.				
5.	I am concerned about my privacy in Exeter City centre.				

То	To what extent do you agree with each of the following statements?				
1.	It is acceptable that CCTV surveillance is used in Exeter city centre.				
2.	I do not understand why anyone would want the CCTV cameras in place.				
3.	The use of CCTV cameras in Exeter city centre is unfair.				
4.	I think it is justified that CCTV cameras are in use in Exeter city centre.				

То	what extent do you agree with each of the following statements?	
1.	The use of CCTV cameras is essential for the smooth running of the city of Exeter.	
2.	In order to protect my own and other's safety, the use of CCTV cameras is vital.	
3.	The CCTV cameras in Exeter city centre do not help in any way.	
4.	It would be unwise not to use CCTV in Exeter city centre.	
5.	The use of CCTV is a basic need in cities such as Exeter.	
6.	This level of CCTV surveillance is not required in Exeter city centre.	

1	2	3	4	5	6	7
= strongly	= disagree	= slightly	= neither agree	= slightly	= agree	= strongly
disagree		disagree	nor disagree	agree		agree

To	To what extent do you agree with each of the following statements?				
1.	I trust that the authorities have Exeter people's best interests at heart with regard to the CCTV in use.				
2.	The authorities just want to appear to be helping the people of Exeter.				
3.	The authorities want to catch people like me out with the surveillance.				
4.	I believe that the authorities trust Exeter people like me.				

To what extent do you think each of the following is the purpose of CCTV cameras?				
1.	For my safety.	5.	. To prevent theft.	
2.	For the safety of others.	6.	. To prevent misbehaving.	
3.	Because of previous incidents.	7.	. To prevent violence.	
4.	To check up on people.	8.	. To prevent shoplifting.	

1	2	3	4	5	6	7
= not at all			= neutral			= very much

If I saw the sign I was shown today, the CCTV cameras in Exeter City Centre would make me feel					
1.	Protected		5.	Relaxed	
2.	Self-conscious		6.	Guilty	
3.	Reassured		7.	Safe	
4.	Distrusted		8.	Anxious	

Some personal information					
Age					
Gender	Male / Female				

THANK YOU VERY MUCH FOR YOUR TIME, HELP AND COOPERATION!

Please read the following information and keep it in mind for the purposes of the questions that follow:

There are a small number of closed circuit television (CCTV) surveillance cameras in place inside and outside Timepiece nightclub. Due to several minor incidents involving local people, there has been a suggestion to introduce quite a few more (currently there are only around four cameras). In order to target local people, the University of Exeter has requested that the owners place these extra cameras. It is intended that the new cameras may be used on any night, but particularly on Fridays which is a night attended by both locals and students. This should enable the owners to ensure the behaviour of locals is appropriate on this mixed customer night.

There are a small number of closed circuit television (CCTV) surveillance cameras in place inside and outside Timepiece nightclub. Due to several minor incidents involving students, there has been a suggestion to introduce quite a few more (currently there are only around four cameras). In order to target students, the University of Exeter has requested that the owners place these extra cameras. It is intended that the new cameras may be used on any night, but particularly on Wednesdays which is a night attended predominantly by students. This should enable the owners to ensure the behaviour of students is appropriate on this largely student night.

Now, please tell us how you would feel about the new CCTV at Timepiece, given what you have read above:

For each of the following items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

To what extent do you agree with each of the following statements?				
1.	The new CCTV cameras would be aimed at students.			
2.	I believe the new CCTV cameras would be aimed at non-students.			
3.	I would feel targeted by the new CCTV cameras at Timepiece.			
4.	The new cameras would be used to target local people.			

To	To what extent do you agree with each of the following statements?				
1.	The use of more CCTV cameras around Timepiece would be an invasion of my privacy.				
2.	I would feel comfortable with the level of CCTV surveillance at Timepiece.				
3.	The new CCTV at Timepiece would make me feel uneasy.				
4.	I would feel like someone was always watching me.				
5.	I would feel concerned about my privacy at Timepiece if more CCTV were introduced.				

To what extent do you agree with each of the following statements?				
1.	It would be acceptable that to use more CCTV surveillance around Timepiece.			
2.	I do not understand why anyone would want more CCTV cameras in place.			
3.	The use of more CCTV cameras at Timepiece would be unfair.			
4.	I think it would be justified to use more CCTV cameras at Timepiece.			

To what extent do you agree with each of the following statements?				
4	I trust that the University have Exeter students' best interests at heart with regard to introducing more CCTV at Timepiece.			
1.	· ·			
_	The University of Exeter has good intentions in requesting the use of more CCTV			
2.	cameras.			
3.	The University of Exeter cares about my welfare.			

То	what extent do you agree with each of the following statements?	
	The introduction of more CCTV cameras is essential for the smooth running of	
1.	nightclubs such as Timepiece.	
	In order to protect my own and other students' safety, the use of more CCTV	
2.	cameras is vital.	
3.	The new CCTV cameras at Timepiece will not help in any way.	
4.	It would be unwise not to introduce more CCTV around Timepiece.	
5.	The use of more CCTV is a basic need at nightclubs such as Timepiece.	
6.	This new level of CCTV surveillance is not required around Timepiece.	

1	2	3	4	5	6	7
= strongly	= disagree	= slightly	= neither agree	= slightly	= agree	= strongly
disagree		disagree	nor disagree	agree		agree

	To what extent do you agree that each of the following is the purpose of the new CCTV at Timepiece? Please rate every item, rather than choosing a few.						
	To prevent locals from						
1.	For my safety.		5.	behaving inappropriately.			
				Because of previous incidents			
2.	For the safety of other students.		6.	involving locals.			
	To prevent students from behaving			To combat drunken student			
3.	3. inappropriately. 7. behaviour.						
				To deter bad behaviour from			
4.	To check up on students.		8.	students.			

То	To what extent do you agree with each of the following statements?				
1.	I see myself as being part of the University of Exeter community.				
2.	I am pleased to be a member of the University of Exeter.				
3.	I feel strong ties with other members of the University of Exeter.				
4.	I identify with other people within the University of Exeter community.				

For each of these final items, please choose a number that best represents the extent to which you would feel each emotion, and write it in the corresponding box, where:

1 2 3 4 5 6 7
= not at all = neutral = very much

The	The introduction of more CCTV around Timepiece would make me feel						
1.	Protected	5.	Relaxed				
2.	Self-conscious	6.	Guilty				
3.	Reassured	7.	Safe				
4.	Distrusted	8.	Anxious				

THANK YOU VERY MUCH FOR YOUR TIME, HELP AND COOPERATION!

Please read the following report carefully, and keep it in mind for the purposes of the questions that follow:

Cardiff is Dangerous

According to new statistics, Cardiff has been shamed for its high levels of crime and identified as setting a terrible example to the rest of the UK.

Both police figures and independent statistics provide startling evidence that the level of crime in Cardiff City Centre is surprisingly high in relation to other cities of comparable size. For example, levels of vandalism have escalated over the last 7-10 years, and violent crime is at its highest point since 1990. In particular, the number of reported knife crimes victimising Cardiff residents have doubled in the last 5 years. Survey data shows that Cardiff residents have condemned the city as being unsafe, commenting on how they feel "unprotected" living here. In addition, a recent national news report referred to Cardiff as "surprisingly dangerous" and said it displayed a terrible example to the rest of the country ...

... Over the last two years, a great deal of CCTV cameras have been put into operation in Cardiff City Centre. The level of surveillance is now considered to be relatively high, with cameras in operation along all of the main shopping streets and in the majority of shops. Perhaps unsurprisingly given Cardiff's crime record, the council have made it known that they are planning to install many more CCTV cameras across the city.

Please read the following report carefully, and keep it in mind for the purposes of the questions that follow:

Cardiff is Safe

According to new statistics, Cardiff has been praised for its low levels of crime and identified as setting a good example to the rest of the UK.

Both police figures and independent statistics provide reassuring evidence that the level of crime in Cardiff City Centre is surprisingly low in relation to other cities of comparable size. For example, levels of vandalism and violent crime are some of the lowest in the country. In particular, the number of reported knife crimes in Cardiff is half that of other comparable cities. Survey data shows that residents have complimented the city on its safety record, commenting on how protected they feel living here. In addition, a recent national news report referred to Cardiff as a "safe haven" and said it displayed an excellent example to the rest of the country ...

... Over the last two years, a great deal of CCTV cameras have been put into operation in Cardiff City Centre. The level of surveillance is now considered to be relatively high, with cameras in operation along all of the main shopping streets and in the majority of shops. Despite the praise Cardiff has received for its low crime levels, the council have made it known that they are planning to install many more CCTV cameras across the city.

For each of the following items, please choose a number that best represents the extent to which you agree with each statement, and write it in the corresponding box, where:

To what extent do you agree with each of the following statements?				
1.	We are under high threat of crime in Cardiff.			
2.	Cardiff residents feel safe living here.			
3.	There is no need to worry about the threat of crime here in Cardiff.			
4.	The fear of crime is a big issue for Cardiff residents.			

As you answer the following questions, please remember to consider the information about Cardiff, crime and CCTV given on an earlier page.

1	2	3	4	5	6	7
= strongly disagree	= disagree	= slightly disagree	= neither agree nor disagree	= slightly agree	= agree	= strongly agree

То	To what extent do you agree with each of the following statements?				
1.	I feel a strong sense of belonging to the city of Cardiff.				
2.	I feel strong ties with other people from Cardiff.				

То	To what extent do you agree with each of the following statements?					
1.	The use of CCTV cameras in Cardiff city centre is an invasion of my privacy.					
2.	I feel comfortable with the level of CCTV surveillance in Cardiff city centre.					
3.	The CCTV in Cardiff City Centre makes me feel uneasy.					
4.	I feel like someone is always watching me.					
5.	I am concerned about my privacy in Cardiff City centre.					

To what extent do you agree with each of the following statements?					
1.	It is acceptable that CCTV surveillance is used in Cardiff city centre.				
2.	I do not understand why anyone would want the CCTV cameras in place.				
3.	The use of CCTV cameras in Cardiff city centre is unfair.				
4.	I think it is justified that CCTV cameras are in use in Cardiff city centre.				

То	To what extent do you agree with each of the following statements?				
1.	The use of CCTV cameras is essential for the smooth running of the city of Cardiff.				
١.	Cardin.				
2.	In order to protect my own and other's safety, the use of CCTV cameras is vital.				
3.	The CCTV cameras in Cardiff city centre do not help in any way.				
4.	It would be unwise not to use CCTV in Cardiff city centre.				
5.	The use of CCTV is a basic need in cities such as Cardiff.				
6.	This level of CCTV surveillance is not required in Cardiff city centre.				

1	2	3	4	5	6	7
= strongly	= disagree	= slightly	= neither agree	= slightly	= agree	= strongly
disagree		disagree	nor disagree	agree		agree

То	To what extent do you agree with each of the following statements?				
1.	I trust that the authorities have Cardiff people's best interests at heart with regard to the CCTV in use.				
2.	The authorities just want to appear to be helping the people of Cardiff.				
3.	The authorities want to catch people like me out with the surveillance.				
4.	I believe that the authorities trust Cardiff people like me.				

	To what extent do you think each of the following is the purpose of CCTV cameras?						
1.	For my safety.		5.	To prevent theft.			
2.	For the safety of others.		6.	To prevent misbehaving.			
3.	Because of previous incidents.		7.	To prevent violence.			
4.	To check up on people.		8.	To prevent shoplifting.			

For each of these final items, please choose a number that best represents the extent to which you feel each emotion, and write it in the corresponding box, where:

1	2	3	4	5	6	7
= not at all			= neutral			= very

Thinking about the information I read earlier, the CCTV cameras in Cardiff City Centre make me feel							
1.	Protected		5.	Relaxed			
2.	Self-conscious		6.	Guilty			
3.	Reassured		7.	Safe			
4.	Distrusted		8.	Anxious			

Some personal information						
Age						
Gender	Male / Female					

THANK YOU VERY MUCH FOR YOUR TIME, HELP AND COOPERATION!

B. Manipulation threat

Please read the following information, and bear it in mind for the rest of the questionnaire.

B.01: According to the latest figures, levels of crime from intruders on the University of Exeter's campuses are low. In particular, over the last few years there have been extremely few incidents in or near Washington Singer Laboratories (the School of Psychology). Reports from both local Police and University security (Estate Patrol) provide reassuring evidence that over the last year, the amount of people trying to unlawfully enter Washington Singer, and level of crime against our students, has been surprisingly low in comparison to department buildings at other universities. For example, there have been a relatively low number of outsiders managing to enter Washington Singer to carry out thefts and personal attacks on students.

B. Manipulation threat

Please read the following information, and bear it in mind for the rest of the questionnaire.

B.01: According to the latest figures, levels of crime from intruders on the University of Exeter's campuses are high. In particular, over the last few years there have been several incidents in or near Washington Singer Laboratories (the School of Psychology). Reports from both local Police and University security (Estate Patrol) provide concerning evidence that over the last year, the amount of people trying to unlawfully enter Washington Singer, and level of crime against our students, has been surprisingly high in comparison to department buildings at other universities. For example, there have been a relatively high number of outsiders managing to enter Washington Singer to carry out thefts and personal attacks on students.

C. Threat manipulation check

Now, please tell us how you feel about the threat to students in Washington Singer, given what you have read on the previous page. Select the box that best represents how much you agree or disagree with each of the following statements.

now mu	ich you agree oi	r disagr	ee witl	h each of the foll	owing	statem	ients.	
C.01: We are u	ınder a high thr	eat of c	rime ir	n Washington Sir	nger 💮			
	Please choose th	ne appro	priate r	esponse for each i	tem			
	Strongly			Neither Agree nor			Strongly	
	Disagree			Disagree			Agree	
C.02: Psycholo	gy students car	n feel sa	afe in V	Washington Sing	er			
	Please choose th	ne appro	priate r	esponse for each i	<u>tem</u>			
	Strongly			Neither Agree nor			Strongly Agree	
	Disagree Disagree							
C.03: There is	no need to wor	ry abou	t the t	hreat of crime in	Washi	ngton	Singer	
C.03: There is		-		hreat of crime in esponse for each i		ngton	Singer	
C.03: There is	Please choose the Strongly	-		esponse for each i Neither Agree nor		ngton	Strongly	
C.03: There is	Please choose th	-		esponse for each i		ngton		
C.03: There is	Please choose the Strongly	-		esponse for each i Neither Agree nor		ngton :	Strongly	
	Please choose the Strongly Disagree	ne appro	priate r	esponse for each i Neither Agree nor	tem		Strongly Agree	
C.04: The three	Please choose the Strongly Disagree The Disa	coming	priate r	esponse for each i Neither Agree nor Disagree	r is a b		Strongly Agree	
C.04: The three	Please choose the Strongly Disagree at of outsiders cludents Please choose the Strongly	coming	priate r	Neither Agree nor Disagree Cashington Singe Response for each i	r is a b		Strongly Agree	
C.04: The three	Please choose the Strongly Disagree at of outsiders outents Please choose the Please choose the Strongly Disagree at of outsiders outents	coming	priate r	esponse for each i Neither Agree nor Disagree Cashington Singe esponse for each i	r is a b		Strongly Agree	
C.04: The three	Please choose the Strongly Disagree at of outsiders cludents Please choose the Strongly	coming	priate r	Neither Agree nor Disagree Cashington Singe Response for each i	r is a b		Strongly Agree	

D. Manipulation surveillance

Please now read the following additional information, and bear in mind everything you have read for the rest of the questionnaire.

D.01: Security in Washington Singer currently consists of a very small number of CCTV cameras placed around the building, e.g., near the front door. Recently, the number of cameras was reviewed, with the possibility of either installing more cameras in the coming months, or leaving the level unchanged. However, the School of Psychology has no plans to increase the level of security at the moment, so it will continue unchanged. Throughout the rest of the questionnaire, the decided number of cameras (i.e., no change - very few cameras) will be referred to as the new surveillance plan.

D. Manipulation surveillance

Please now read the following additional information, and bear in mind everything you have read for the rest of the questionnaire.

D.01: Security in Washington Singer currently consists of a very small number of CCTV cameras placed around the building, e.g., near the front door. Recently, the number of cameras was reviewed, with the possibility of either installing more cameras in the coming months, or leaving the level unchanged. Subsequently, the School of Psychology now plans to increase the level of security to include many more CCTV cameras around the building, including in the undergraduate computer room and lecture/seminar rooms. Throughout the rest of the questionnaire, the decided number of cameras (i.e., increase - many more cameras) will be referred to as the new surveillance plan.

E. Surv manipulation check

Now, we just need to check you understood the information we gave you. Please respond to the following items about the level of security in Washington Singer under the new surveillance plan, given what you have read on the previous page. Select the box that best represents how much you agree or disagree with each of the following statements.

E.01: The amount of surveillance cameras in Washington Singer will increase under

the new surve		nee ear	c.us	washington on	igei W		suse under
	Please choose th	ne appro	priate	response for each i	<u>tem</u>		
	Strongly Disagree	3 ,		Neither Agree nor Disagree			Strongly Agree
E.02: Under t	he new surveilla	nce pla	n, the	re will be very fev	v came	eras in	Washington
	Please choose th	ne appro	priate	response for each i	tem		
	Strongly Disagree			Neither Agree nor Disagree			Strongly Agree
	nber of cameras the new surveilla			ashington Singer	is to s	tay the	same
	Please choose th	ne appro	priate	response for each it	tem		
	Strongly Disagree			Neither Agree nor Disagree			Strongly Agree
E.04: The new Washington S	-	an calls	for lo	ts of cameras to l	oe plac	ed aro	und
	Please choose th	ne appro	priate	response for each it	tem		
	Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

F. School Intentions

Please select the box that best represents how much you agree or disagree with each of the following statements.

	r decision on th	e new	survei	•		rests a	t heart with
		ne appr	opriate	response for each i	tem		C 1 1
	Strongly Disagree			Neither Agree nor Disagree			Strongly Agree
	Disagree			Disagree			Agree
	ool in Psycholog surveillance pl		jood ir	ntentions in makir	g the	decisio	n they did
	Please choose th	ne appro	priate	response for each i	tem_		
	Strongly			Neither Agree nor			Strongly
	Disagree			Disagree			Agree
	think the Schoo ew surveillance		ycholo	gy had students' i	nteres	ts in m	ind when
		ne appro	priate	response for each i	tem		
	Strongly			Neither Agree nor			Strongly
	Disagree	_	_	Disagree	_	_	Agree
F.04: The Scho	ool of Psycholog	y cares	abou	t my welfare			
	Please choose th	ne appro	priate	response for each i	tem		
	Strongly			Neither Agree nor			Strongly
	Disagree			Disagree			Agree
G.01: The amo	eacl	best rep h of the we wi	resen follo	otability Its how much you wing statements. In Washington Si			
	Please choose th	he appr	opriate	response for each i	tem		
	Strongly			Neither Agree nor			Strongly
	Disagree			Disagree			Agree
	lan, rather than	the ot	her op	t of cameras were tion response for each i		en for t	he new
	Strongly			Neither Agree nor			Strongly
	Disagree			Disagree			Agree
G.03: The amo	appropriate			hington Singer un response for each i		e new s	surveillance Strongly
	Disagree			Disagree			Agree
G.04: I think t	Please choose t	-		r Washington Sing response for each	-	ustified	
	Strongly			Neither Agree nor			Strongly
	Disagree			Disagree			Agree

H. Privacy

Please select the box that best represents how much you agree or disagree with each of the following statements.

H.01: Under the new surveillance plan, the cameras around Washington Singer will be an invasion of my privacy Please choose the appropriate response for each item									
		he appro	opriate		tem				
	Strongly			Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
	omfortable with			of CCTV cameras t	hat wi	ll be us	ed in		
	Please choose t	he appro	opriate	response for each i	tem				
	Strongly	•	•	Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
H.03: The amo		ed in W	ashing	gton Singer in the	new s	urveill	ance plan		
	Please choose t	he appro	opriate	response for each i	tem				
	Strongly			Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
	ne new surveilla in Washington (ın is in	place, I will feel	like so	meone	is always		
	Please choose t	he appro	opriate	response for each i	tem				
	Strongly		•	Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
H.05: I feel co surveillance p	lan		·	Washington Sing		ght of	the new		
		the appro	opriate	response for each i	tem				
	Strongly			Neither Agree nor			Strongly		
	Disagree		_	Disagree	_		Agree		
		I. Aı	prop	riateness					
Please sele	ct the box that			ts how much you	agree	or disa	gree with		
	ead	h of the	follo	ving statements.					
			new รเ	ırveillance plan is	essen	tial for	the smooth		
running of the	School of Psyc								
	Please choose t	he appro	opriate	response for each i	tem				
	Strongly			Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
	be unwise to hat in the new s			nt level of surveill	ance a	round \	Washington		
Singer than ti									
		ne appro	opriate	response for each i	tem				
	Strongly			Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		
T 03: The la	avel of curve	aillanc	a tha	t has been ch	ocan	ic anı	nronrista		
1.03: THE R	evel of Surve	manic	e uid	t has been ch	osen	ıs apı	propriate		
ומ	ease choose the	annror	riato r	esponse for each	item				
<u>PI</u>		approp	mate f	esponse for each	itelli		6 1 1		
	Strongly			Neither Agree nor			Strongly		
	Disagree			Disagree			Agree		

J. Necessity Please select the box that best represents how much you agree or disagree with each of the following statements. J.01: A high level of surveillance is needed in Washington Singer Please choose the appropriate response for each item Strongly Neither Agree nor Strongly Disagree Disagree Agree J.02: We don't really need many CCTV cameras in the School of Psychology Please choose the appropriate response for each item Stronaly Neither Agree nor Strongly Disagree Disagree Agree J.03: In order to protect my own and other students' safety, more surveillance is vital in Washington Singer Please choose the appropriate response for each item Strongly Neither Agree nor Strongly Disagree Disagree Agree J.04: More cameras in Washington Singer would not help in any way Please choose the appropriate response for each item Strongly Strongly Neither Agree nor Disagree Disagree Agree K. Purpose K.01: To what extent do you agree that each of the following is the purpose of the CCTV in the new surveillance plan? Please rate every item, rather than choosing a few. Please choose the appropriate response for each item Neither Strongly Agree nor Strongly Disagree Disagree Agree For my safety For the safety of other students To check up on students To prevent intruders from getting into Washington Singer So staff know where students are and what they are doing To see how students behave when

lecturers are not present

		L	Emot	ions					
L.01: Please click on the box that best represents how much you think you will feel each of the following emotions. Under the new surveillance plan, the amount of CCTV around Washington Singer will make me feel									
	Please choose th					h item			
		Not at a		•				Ext	remely
	Protected								
	Self-conscious								
	Reassured								
	Distrusted								
	Relaxed								
	Guilty								
	Safe								
	Anxious								
Please selec	t the box that b	est rep	cholog presents followi	how m	iuch ye		ee o	r disa	agree with
M.01: I see my	self as being pa	art of tl	ne Scho	ol of Ps	ycholo	ogy			
·	Please choose th				-				
	Strongly			Neither A	_	or			Strongly
	Disagree			Disa	igree				Agree
				L					
M.02: I am ple	ased to be a me				-				
	Strongly	іе арріс	риасе те	Neither A					Strongly
	Disagree				agree	,			Agree
				[
M.03: I feel str	ong ties with t	he Scho	ool of Ps	ycholo	gy				
	Please choose th	ne appro	priate re	esponse	for eac	h item			
	Strongly			Neither A	-	or			Strongly
	Disagree			Disa	gree		_		Agree
				L		L			
M.04: I identify	y with the Scho	ol of Ps	sycholog	ЭУ					
	Please choose t	he appr	opriate re	esponse	for eac	ch item	ļ.		
	Strongly			Neither	Agree no				Strongly
	Disagree			Disa	agree		_		Agree
Thanks for y	vour answers n		I. Abou			hit abo	+	id	that's OK
	our answers; n	ow we	just nee	eu to Kr	iow a l	DIL ADC	out y	ou, II	ulat S UK.
N.01: How old	•	ir ancies	or horo:						
	Please write you	ur answe	er nere:						
N.02: Are you:	:								
,	Please choose o	nly one	of the f	ollowing	ı:				
	☐ male				_				
	female								